

December 1959

SCHOOL MANAGEMENT

PRACTICAL SOLUTIONS TO SCHOOL MANAGEMENT PROBLEMS



DOES FEDERAL AID MEAN FEDERAL CONTROL?

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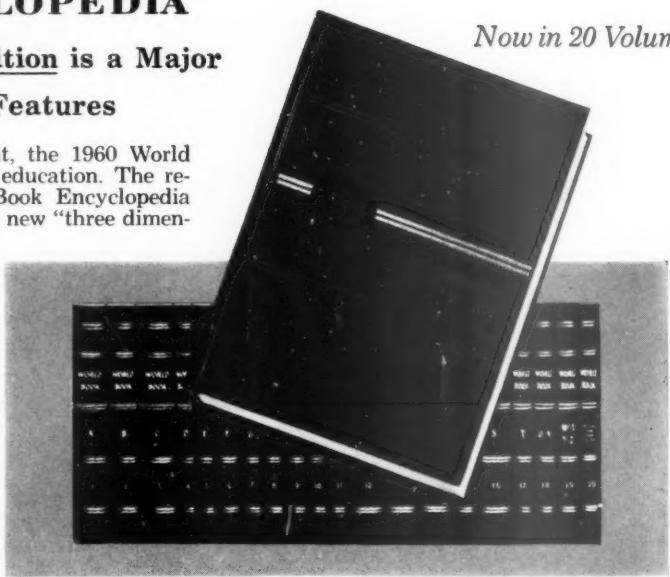
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DEC

May we share with you

OUR 1960 PLANS?

Dear Readers: In 1960, SCHOOL MANAGEMENT will release a series of four new services which will be of direct and immediate value to American educators. As 1959 closes, we would like to share these plans with you.

1. The Cost-of-Education Index

For many years, educators have expressed their need for an education yardstick that would be similar to the Cost-of-Living Index.

The yardstick would reflect regional differences in such things as building costs, teachers' salaries, and interest rates. When local education costs rise, it would pinpoint *why* costs were rising. Above all, it would give local school officials some benchmarks they could use to measure their own financial efforts and to make such measurements understandable to their taxpayers. SCHOOL MANAGEMENT has retained Dr. O. F. Furno, of the U. S. Office of Education, to devise and compile this Cost-of-Education Index. We have already called on many of you for statistical information to be used in that project. We expect to begin to bring you results in February or March.

2. School Construction Reports

At the present time, there is no truly accurate way to measure, except by "guesstimate," the rate at which new classrooms are being built in the U. S. As a service to federal and state school officials, and to help school suppliers with their sales and production planning, SCHOOL MANAGEMENT has formed a new division to compile and report school construction activity. One of the important by-products will be figures we will give you of actual construction costs in your region for both elementary and secondary structures. The 12,000 largest school districts in the U. S. will be contacted, at least once a year, to determine current and projected new school construction. We have already covered a number of states. To those of you who have already cooperated when your district was phoned, our sincere thanks.

4. School Referendum Kit

During 1959, approximately 25% of all school bond issues in the U. S. were defeated at the polls. In many cases, they failed for want of good local public relations and a citizen education program. In other cases, organized groups hostile to education have spread half-truths and misinformation designed to undermine voter confidence. To assist local officials who want to conduct public information programs prior to a bond vote, we are preparing a series of "answers" to the 15 or 20 most-frequently used arguments offered by anti-school forces. (Examples: "What's wrong with 35 pupils to a teacher?" "One-story schools are more expensive to build," etc.) These "answers" will be offered to district officials without charge. In addition, volume reprints for mailing purposes will be provided at absolute cost to school districts requesting them. This project is to be "off the ground" by early in the year. Announcement of the availability of this service will be made in the February or March issue of SCHOOL MANAGEMENT.

In addition to these four new projects, SCHOOL MANAGEMENT will again publish—in October—its SCHOOL OFFICE EQUIPMENT ANNUAL. This new publication, designed to assist administrators in the use, selection, and purchase of modern business systems and equipment, was distributed without charge, in 1959, to each school district in the U. S. with over 300 pupils enrolled. Finally, we will continue to focus the entire editorial content of SCHOOL MANAGEMENT on "practical solutions to management problems."

To provide these services, we will need the continuing support and cooperation of the 52,000 practicing educators who read our pages monthly. In particular, we urge you to share with us your successful experiences in solving local school problems. It is by reporting this down-to-earth, usable information that we can best serve the needs of the men and women who manage the education of our nation's youth.

3. School Building Product File

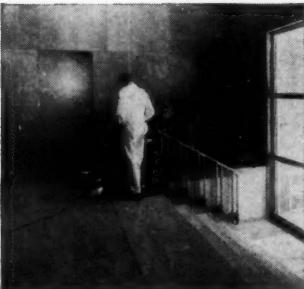
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Contents for December 1959

Features

Does federal aid mean federal control?	34
<i>Commissioner of Education Lawrence G. Derthick discusses three objections of the Cincinnati board of education regarding federal aid for schools.</i>	
Central kitchens: a better way to keep lunch costs down	39
<i>Often the expense of equipping individual kitchens at each school is prohibitive. Central kitchens may be the answer to this problem—if you plan ahead.</i>	
The great grab bag: government surplus	42
<i>Your school district has but to raise its hand to participate in one of the biggest give-aways in the history of this country.</i>	
How to help your inexperienced teachers do a better job	46
<i>Here's a new way—well within the reach of any school district—to supplement the quality of instruction in the classroom.</i>	
They dunked doughnuts to win votes	57
<i>The Anaheim, Calif., school district used "kaffee klatsches" to explain to the voters the need for \$28 million worth of bond issues and state loans.</i>	

Short Reports

How to use punch cards to solve your ticketing problems	60
<i>Modern punch card techniques help to distribute sports events tickets.</i>	
Television can tell your school story	64
<i>Local TV can show voters exactly what is going on in the schools.</i>	
How to control delinquents	68
<i>Specific examples show how school action reduces juvenile crime.</i>	
How to build a library on a shoestring budget	73
<i>Zeeland, Mich., converted classrooms into a modern, spacious library.</i>	

Departments

Letters to the editor	6	News of the schools	23
<i>A sampling of correspondence</i>		<i>A digest of current happenings</i>	
Yours for the asking	13	Thought starters	71
<i>Free literature you can use</i>		<i>A monthly review of ideas</i>	
Things your public ought to know	16	Press releases	81
<i>On stock plans for schools</i>		<i>News from business firms serving your schools</i>	
Where to get help	21	Reader service section	84
<i>A guide to useful information</i>			

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**SCHOOL
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22 West Putnam Ave., Greenwich, Conn.

Volume 3

Number 12

Publisher
Jerome W. Harris

President
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EDITORIAL STAFF

Editor: Jerome W. Harris
Managing Editor: Paul Abramson
Ass't Managing Editor: Virginia E. Ray
Feature Editor: Theodore C. Boytos
Departments Editor: Alice Honore Drew
Art Director: Laurence Lustig
Assistant Editors: Edith Hulley
Kent C. McKamy
Production Manager: Joan A. Longnecker

BUSINESS STAFF

Business Manager: Edwin D. Kline
Circulation: A. A. Novy, manager
Marie M. LaGuardia
Sales Promotion Mgr.: Frederick L. Bunting

Advertising Offices

New York 141 East 44th Street, MU 7-0583 Eastern
Division Manager: Gil Hand—Joseph Hanson—
Harrison M. Rollins—Donald R. Buckner

Chicago 612 North Michigan Avenue, Del 7-0112
Western Division Manager: William S. Hutchings
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Los Angeles The Robert W. Walker Co., 730
South Western Avenue, Dunkirk 7-4388

San Francisco The Robert W. Walker Co., 57 Post
Street, Sutter 1-5568

Houston Ralph Runnels, 5210 Morningside Drive,
Jackson 4-6633



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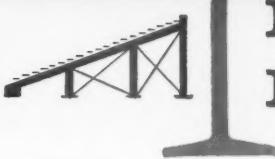


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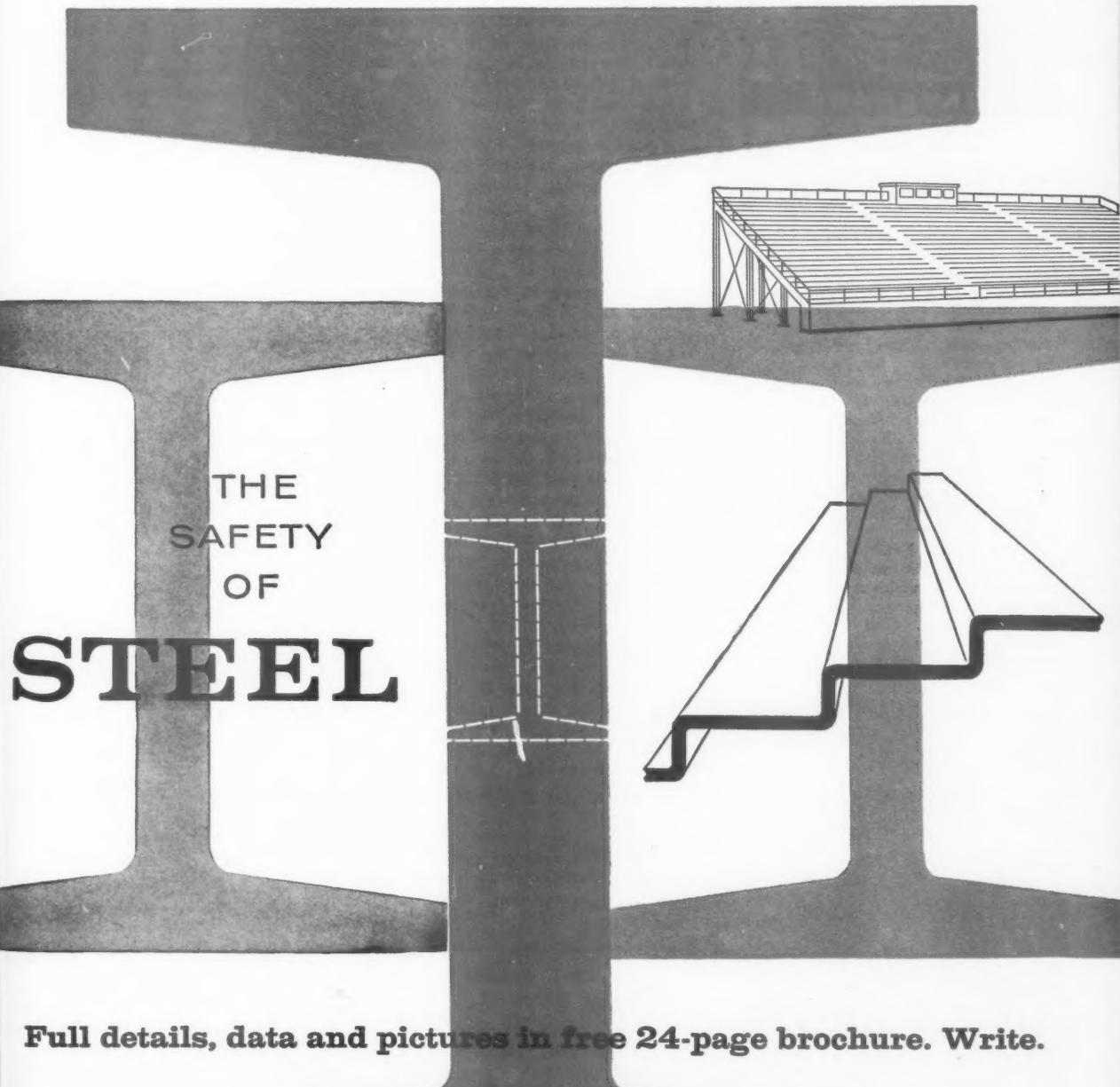
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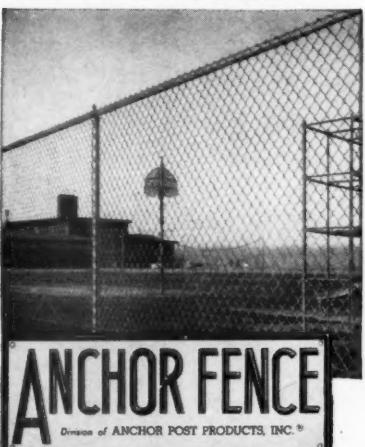
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Local science action

SIR: It has been my intent to write to you for some time and express appreciation for the outstanding service which you and your staff rendered the field of science education through the publication of the excellent article, "Yardsticks to help you measure your school's science program," (SM, May '59). While there may be differences of opinion on some of the proposals which were made in the article, the general over-all picture is excellent and a real credit to the thorough work your staff did in its preparation.

Today more than \$50 million are being spent annually for the improvement of science teaching over the nation. And yet there is relatively little attention being directed to basing these expenditures upon an assessment of the strengths and weaknesses of science teaching in the local school systems. It is at these local levels that lasting, long-range improvement of science teaching must begin. The movement must grow up from the roots if it is to be really vigorous.

It is my conviction that if in some way a national movement to improve science teaching at the local level could be instituted and carried forward, it would insure the better use of the large amounts of federal and local funds now being used in haphazard fashion. The article in your magazine impresses me as being a beginning point for local communities interested in improving science teaching.

I would be very happy to have from you any ideas which you or your staff might have in regard to stimulating school boards, school administrators and science teachers over the nation to make use of this article as a basis for improving their programs in science.

ELLSWORTH S. OBOURN
SPECIALIST FOR SCIENCE
U. S. OFFICE OF EDUCATION
WASHINGTON 25, D. C.

■ Let's hear from our readers on this.
ED.

Driver training after dark

SIR: I was interested to read your article, "Experts call for driver training after dark," (SM, Oct. '59 pg. 85).

This is our 12th year of teaching a

course in driver training and our instructor, Mr. Hilligas, who has taught the course all 12 years, always includes a unit on night driving. He also makes a point of having his students drive in all kinds of weather.

Since our town has a population of 2,200, and no traffic signal problems, his night driving includes a trip to neighboring cities which do have traffic lights. Each of his carload of students gets practice that night in the city traffic—necessitating a return at one, two, or three o'clock in the morning.

One of his most amazed admirers is the father of a high school girl of six years ago, who tells how Mr. Hilligas spent 40 minutes once teaching his daughter to drive off the highway, up an inclined, curved drive to his farm home, without killing the engine.

G. L. SIMS
SUPERINTENDENT
ALBION CITY SCHOOLS
ALBION, NEB.

Accident-prone age?

SIR: On page 54 of your issue for July (*How safe are your schools?*, July '59) your boxed editorial statement includes these two items:

"The fifth grade had the greatest number of accidents for any single grade."

"The eight-year-olds experienced the most accidents of any age group."

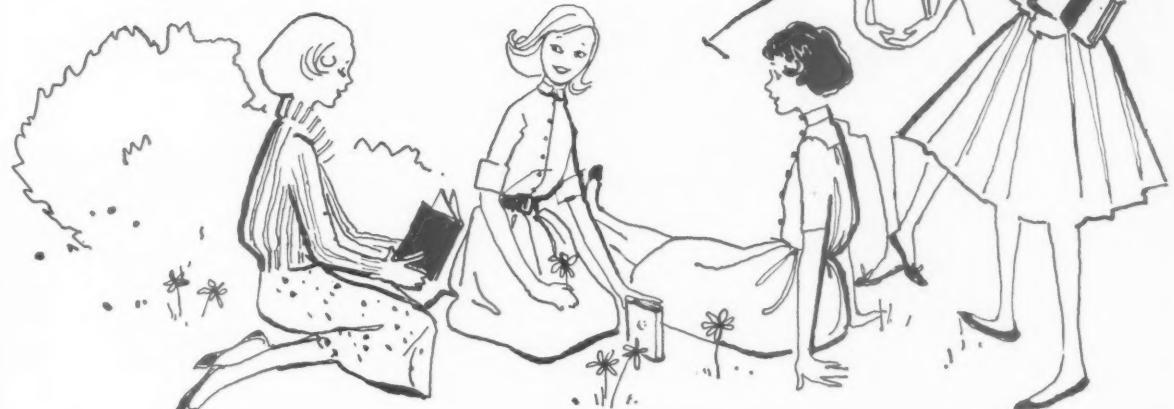
How do you reconcile these two statements? Surely your fifth graders are not eight-year-olds. Can you clarify?

DOUGLAS E. LAWSON
DEPT. OF EDUCATION
SOUTHERN ILLINOIS
UNIVERSITY
CARBONDALE, PA.

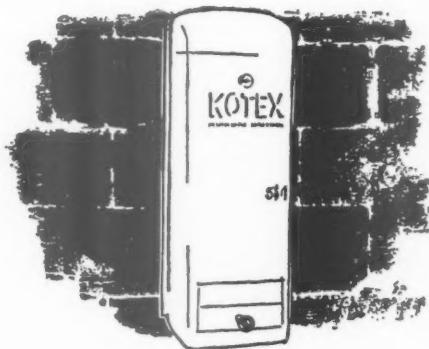
■ There is an apparent discrepancy between these statements but an analysis of what is being said will show that they make sense together. All children of one age are not in the same grade, nor are all children of one grade the same age. Thus, the fifth grade, with nine, 10 and 11-year-old students, had the most accidents per grade. But the eight-year-olds, students in grades two, three and four, had the most accidents as an age group.

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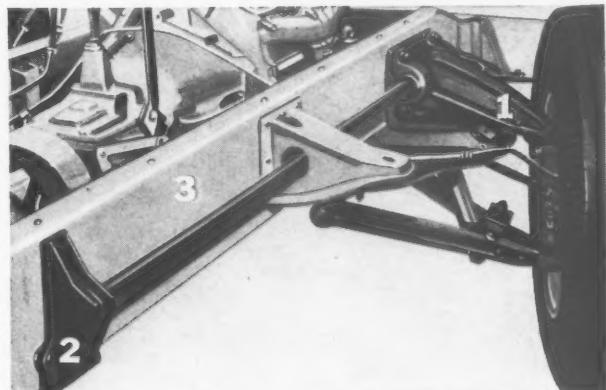
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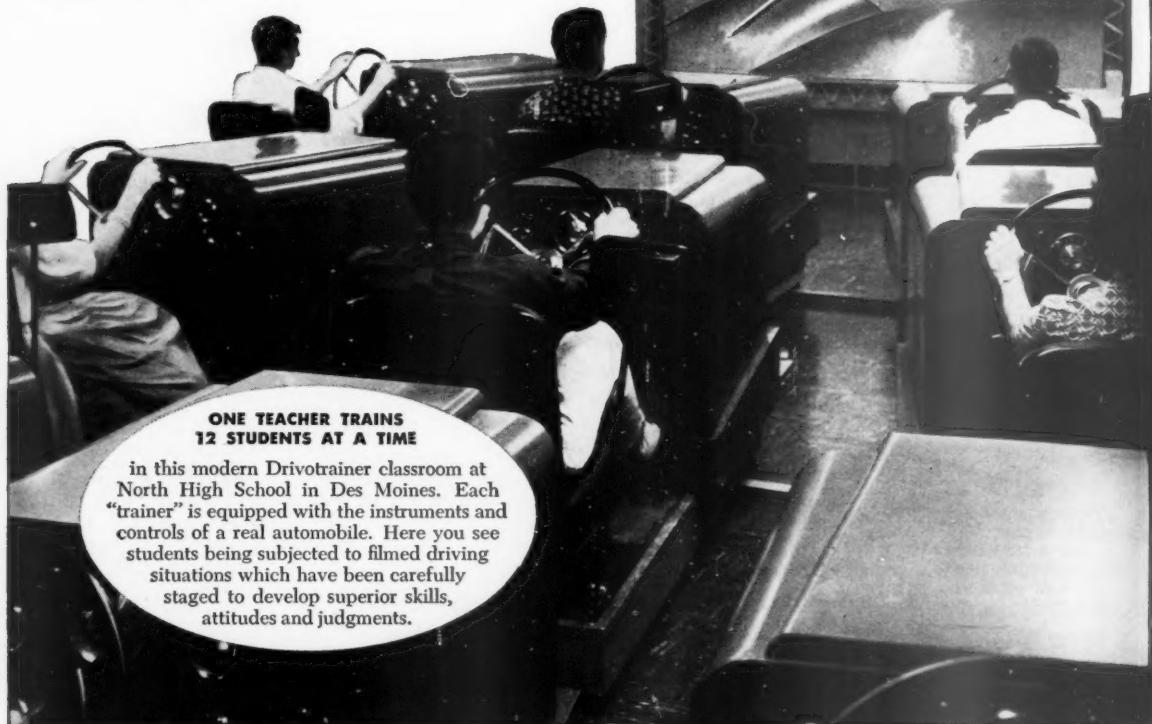
Five years of experience with AETNA

In December of 1954 the first Aetna Drivotrainers were introduced in Iowa. The installation consisted of 5 units at the Iowa State Teachers College. Initially, these were used for basic research. Today they are devoted to the training of future driver education instructors.

Right from the start Iowa teachers and state safety officials recognized the effectiveness and economy of the then new teaching method . . . and made plans for future installations in the state's school system. One of the important facts learned through research and by actual test was that by combining the use of Aetna Drivotrainers with on-the-road instruction in dual-control cars, schools can train up to 50% more students per teacher per year . . . and save up to 30% in cost per pupil.

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Today there are seven Drivotrainer installations in key Iowa schools . . . and this is just the beginning. As pointed out in their own words on the facing page, state officials and teachers agree that the Aetna Drivotrainer is one of the most effective and economical training aids in their driver education program. Their goal: More installations to assist more schools in giving more Iowa teenagers the training they need to become better, safer drivers.



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FRANK B. ULISS
Director, Safety Education Division
Iowa Department of Public Safety

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G. R. "DOC" SPEERS
Field Safety Supervisor
Iowa Department of Public Safety

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(Circle number 700 for more information)



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Waterloo, Iowa

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ALFRED C. BARNES
Director of Safety Education
Dept. of Education and Psychology
Iowa State Teachers College
Cedar Falls, Iowa

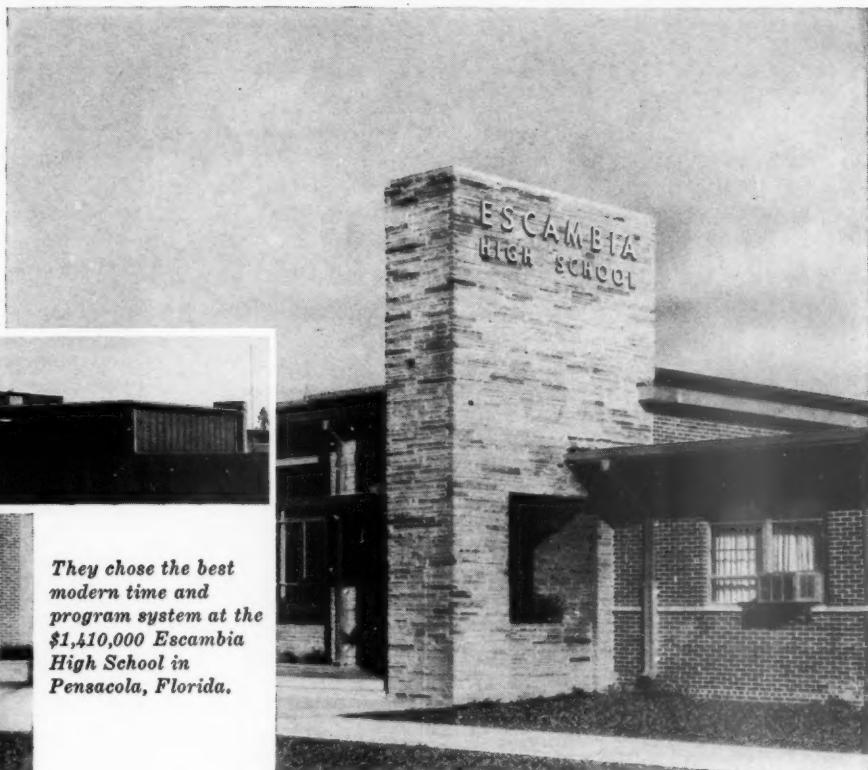
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Using semimicro equipment. Included in a 24-page catalog, just released by Kewaunee Mfg. Co. and its affiliate Kewaunee Technical Furniture Co., is information about several types of two-, four-, six- and 12-student laboratory tables designed specifically for the teaching of semimicro chemistry. The semimicro chemistry method is described in brief, too, and its advantages are cited. The catalog lists, in addition, a variety of semimicro apparatus and glassware, storage counter assemblies and six floor plans for combination semimicro chemistry-physics laboratories.

For a free copy of this catalog, circle number 861 on the Reader Service Card.

Laboratory equipment. Many new models and lines of laboratory freeze-drying, high-vacuum and related equipment are introduced in the 40-page, second edition of the LaPine catalog. New equipment listed includes: Leybold freeze-dryers, VirTis mechanically refrigerated freeze-mobiles and automatic shell freezers, dry ice machines, storage cabinets and capacity extenders, Fluo-War insulated stainless steel flasks, a new line of Leybold vacuum pumps and new models of electronic vacuum gauges and the Kammerer compression vacuum gauge.

For a free copy of this catalog, circle number 876 on the Reader Service Card.

Facts about wood floors. A specifications manual for Northern hard maple, beech and birch flooring, available from the Maple Flooring Mfrs. Association, lists grading rules, information about physical characteristics, quality control at the mills, thicknesses and face widths available, uses of the different grades and a table for estimating quantities of material needed for flooring jobs. Installation is described with suggestions for underfloor construction, waterproofing on or below grade, finish carpentry, sanding and finishing. A guide is given to aid speci-

fication writing for conventional as well as patterned floors and color illustrations are used to identify the three standard grades of hardwood flooring.

For a free copy of this manual, circle number 869 on the Reader Service Card.

Data on building products. Engineering data and specifications to help solve many problems of waterproofing, damp-proofing, painting, caulking, roofing and flooring are contained in the 1959 Building Construction and Maintenance Handbook now available from L. Sonnenborn Sons, Inc. Included in the handbook are 36 pages of tables and charts, materials, estimating guide, weights and measures, paint and concrete work, information of value to architects, engineers, specification writers, contractors and others. The handbook is indexed by products and uses for quick reference.

For a free copy of this handbook, circle number 863 on the Reader Service Card.

Transcript photocopying. A reprint available from Eastman Kodak Co. describes how high schools have solved the clerical problem of providing grade transcripts to graduates and colleges through the use of a photocopying machine. After redesigning the permanent record file card so that all pertinent information appeared on one sheet, the schools used photocopiers to make duplicates of the permanent card, then attached it to the college form.

For a free copy of this reprint, circle number 860 on the Reader Service Card.

Furnaces for shop use. Practical furnace equipment for use in school shops is described and illustrated in a bulletin from the Sunbeam Equipment Corp. Included in the 16-page bulletin is information about furnace selection for particular heat treating processes, layout diagrams and wiring and piping suggestions for school

shops. Specifications are given for a variety of ovens, forges, pot furnaces and melting furnaces as well as a range of accessories and replacement parts. Also described are a heat-treating data book and a heat-treating wall chart, both teaching aids available from the company.

For a free copy of this bulletin, circle number 871 on the Reader Service Card.

All about vertical surfacing. A comparison of average costs, characteristics and limitations of vertical surfacing materials is offered in a pocket-size folder from General Electric. Included in the comparison are laminated plastic, fine wood paneling, painter plaster, ceramic tile and plastic tile. Information is also given on the company's Textolite sheet sizes and finishes.

For a free copy of this folder, circle number 870 on the Reader Service Card.

Planning home economics rooms. Detailed specifications, typical classroom layouts and graphic illustrations and elevation drawings of more than 50 of the company's line of cabinets are included in the Kitchen Maid Corp.'s catalog and planning guide for domestic science and home economics classes. The guide contains many photographs illustrating the versatile features of available cabinet units and how they can be used in schools.

For a free copy of this guide, circle number 867 on the Reader Service Card.

Cut costs underfoot. Step-by-step instruction for cleaning and maintaining all types of hard and resilient floors, along with instructions for carpet shampooing, are featured in the illustrated floor care manual, "How to Cut Overhead Underfoot," offered by Advance Floor Machine Co. Practical suggestions are made for selecting proper equipment, cleaners and waxes, and tips on handling common floor problems are given. Work planning sched-

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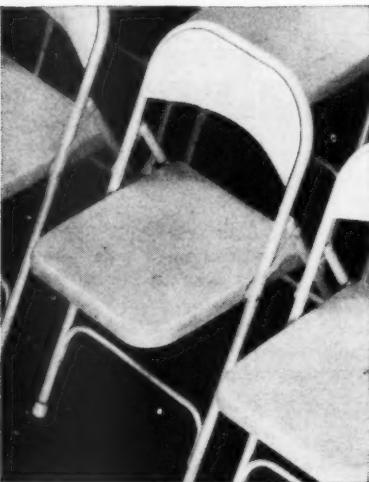
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For church, club, other group seating information, see Yellow Pages (CHAIRS, folding) or write: Shwayder Bros., Inc., Dept. SM-12, Department 29, Mich. © 1959.

(Circle number 730 for more information)

ules and proper job time requirements are also included in the manual.

For a free copy of this manual, circle number 864 on the Reader Service Card.

programs of positive sanitation offered by the firm. A janitor's instruction manual furnishing operational procedures for hygienic sanitation is included.

For free copies of these pamphlets, circle number 868 on the Reader Service Card.

How to use a microphone. The rules of microphone technique, along with a list of common microphone usage problems and solutions, are included in an eight-page booklet distributed by Shure Brothers, Inc. Also included are a description of public address systems' components, tips on buying or improving your own system and facts about the uses and limits of the basic types of microphones.

For a free copy on this booklet, circle number 865 on the Reader Service Card.

Plastic ware. A complete line of disposable culture dishes, tubes and flasks, together with a variety of unbreakable lifetime plastic ware, are featured in a new 24-page catalog issued by Will Corp. The disposable culture dishes, flasks and tubes described can be thrown away after use to conserve costly, time-consuming washing and sterilizing operations. Also included in the catalog are descriptions of non-breaking beakers, bottles, test tubes and other volumetric plastic ware and practically indestructible rattle-proof trays, racks, storage containers and tubing.

For a free copy of this catalog, circle number 895 on the Reader Service Card.

Modular construction. A condensed (16-page) version of its Catalog 106 covering the complete line of basic frames and components of the Emcor Modular Enclosure System is available from Elgin Metalformers Corp. The complete catalog features comprehensive technical and engineering data, specifications, drawings, photographs and illustrations on the units and component parts. A color-coded price list and handy ordering guides supplement the new literature.

For a free copy of this condensed catalog, circle number 893 on the Reader Service Card.

Sanitation. Preventive plant maintenance and effective sanitation control are discussed in three new pamphlets offered by Plunkett Chemical Co. They point out how accumulation of uric scale in washrooms results in costly stoppages, increased deterioration of plumbing, unpleasant odors and infectious bacteria. Also described are two

Floor trucks. In a colorful new 56-page catalog, The Hamilton Caster & Mfg. Co. presents its expanded line of four-wheel platform trucks, box trucks, shelf trucks, wagon trucks, two-wheel trucks, dollies, semi-live skid systems and other trucks for special uses. Included is a buyer's guide section that tells how to select manual equipment and includes data on available types of wheels, bearings, running gear arrangements and superstructures.

For a free copy of this catalog, circle number 884 on the Reader Service Card.

Theatre equipment. An informative kit of materials on stage construction, stage equipment and theatrical hardware is offered by J. R. Clancy, Inc. Included are a 48-page catalog of stage machinery and hardware, a six-page flyer about the company's Scene-Control—a push button scene shifting system—and reprints of two articles dealing with overhead stage construction and the furnishing and design of the small stage.

For free copies of this material, circle number 890 on the Reader Service Card.

Maintenance. A six-page guide describing maintenance and refinishing methods for most types of laboratory work surfaces has been prepared by the Keweenaw Mfg. Co. The various top finishes, cements and air dry enamels available are described and prices are given. In addition, the most commonly used laboratory service fixtures are described, illustrated and their prices are given.

For a free copy of this guide, circle number 889 on the Reader Service Card.

Audio-visual. A new Title III Filmstrip Correlation-Chart, designed to aid teachers and administrators in evaluating materials recommended for purchase under Title III of the National Defense Education Act of 1958, has been made available by the Society for Visual Education, Inc. The chart correlates SVE filmstrip titles with various grade levels and subject areas in sciences, mathematics and modern for-
continued on page 81



Ask any teacher...she'll say RCA

Any subject springs into new life when *RCA "Life-Tested"** 16mm Projectors add sight and sound. Junior and Senior models thread fastest and easiest in 16mm, run quietly as a whisper, throw 20% more light on screen to brighten films. In larger areas, Porto-Arc delivers brilliant pictures and life-like sound.

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THINGS YOUR PUBLIC OUGHT TO KNOW

Basic information that schoolmen can use as a part of a community education program

Why can't we buy stock plans for schools?

A survey of states shows that few found stock buildings successful or inexpensive for their educational programs.

■ ■ ■ Early this year, the state board of education, Olympia, Wash., published results of an interesting survey it conducted while considering the idea of stock plans for schools. A questionnaire was sent to forty-eight states. Forty-one responded.

The answers shed considerable light on the old question of standardized schoolhouse design.

Here are the questions and answers in summary form:

1. Does your state currently have provisions for the use of stock plans in the administration of a state school building program?

■ Four states responded yes—37 responded no. The four that responded yes indicated the use of stock plans was limited to four classroom buildings, or smaller.

2. Are there any large school districts in your state now utilizing stock plans as a major part of their building program?

■ Four states responded yes—37 no.

3. Have stock plans ever been a regular part of the state building program in your state?

■ Seven states responded yes—29 no. One state indicated its program was in operation 40 years ago. Four indicated their stock plan programs were for small schools only, and had been abandoned several years ago.

4. If the practice of using stock plans has been a part of the building program in your state and has been discontinued, please list the major

reasons for dropping the practice.

■ Responses (Quotes):

“1. Not adaptable to the changing educational programs.”

“Not readily adaptable to varying site and weather conditions.”

“Not adaptable to change in the construction and materials industry for best economy.”

“With the construction of larger buildings due to the consolidation of schools, we find that local school authorities are not interested in the use of stock plans.”

“Stock plans did not prove to be economical. They were costly in that many buildings were constructed which did not fit the site and were not suitable to meet community needs.”

“We have not approved the use of any such plans since it is impossible to get construction at a reasonable cost without planning a building in keeping with the terrain of the site and the program to be offered.”

“. . . the cost of design is so small that it is more than made up in the added functionality and efficiency of the building designed for each situation . . . competition is eliminated if a certain stock product is specified . . . hence no savings.”

“Stock plans were supplied by law for buildings not to exceed four classrooms. The law was deleted as the stock plans were not used by the districts.”

5. If stock plans are being used or have been used in your state, what are the average costs (expressed in percentage of cost of total projects) for redesign and re-

engineering the stock plans to fit a given site and a given locality?

■ Two states indicated 5 to 6%; two states indicated 3%; one state indicated 2 to 2.5%; 28 gave no figure. Four respondents indicated information was not available.

6. In the usual situation wherein the school district contracts with an architect for an individual project, what percentage is usually paid for architectural services on new school construction?

■ One state indicated 9%; one state indicated 6.5 to 8%; 25 states indicated 6%; six states indicated 5 to 6%; one state indicated 4.5 to 6%; one state indicated a sliding scale of 4 to 6%. Five states did not respond to this question.

7. If fees are so designated, what percentage is for the design of the new structure?

■ One state indicated 6.4%; two states indicated 6%; one state indicated 5.25%; six states indicated 4.5%; one state indicated 4.25%; 12 states indicated 4%; three states indicated 3 to 4%. Fifteen states made no indication on this question.

8. What percentage is for the supervision during the construction period and final architectural inspection?

■ Sixteen states indicated 2%; two states indicated 1.75%; one state indicated 1.6%; six states indicated 1.5%. Sixteen states did not respond to this question or indicated fees could not be separated on the basis of design and supervision.

WHERE TO GET HELP

A guide to useful information

AUDIO-VISUAL

ETV progress report. Presented in this report are the results of the first nation-wide workshop on the use of television in the schools, held last June at the University of North Carolina. Teachers and principals from more than 200 school systems in 15 states attended to exchange ideas and information, discuss problems and assess the contribution to learning made by educational television. The report discusses the progress of the two-year-old National Program in the Use of Television in the Public Schools. This is followed by a summary of findings on the telecast part of the lesson, the classroom followup, the curriculum, facilities and teacher education.

THE NATIONAL PROGRAM IN THE USE OF TELEVISION IN THE PUBLIC SCHOOLS. Available from The Fund for the Advancement of Education, 477 Madison Ave., New York 22, N. Y. 45 pages. Free.

CURRICULUM

Help for the gifted. The selection of enrichment materials presented in this informative booklet should prove invaluable to teachers of exceptional children. Free and inexpensive offerings from a variety of sources in government and industry are listed by subject categories. The divisions include social studies, health, language arts, fine arts, science and mathematics. Materials include booklets, documents, maps, slides, portraits—all designed to enliven study and discussion and prompt gifted students to develop projects of their own. Appended to each special subject section is a helpful list of suggestions for related activities which the teacher can use to enrich her classroom sessions.

HERE'S HELP FOR YOUR GIFTED CHILD. Published by John F. Dean, Box 211, Newport Beach, Calif. 28 pages. 50 cents.

Mathematics. The various studies in mathematics education currently in progress are concisely summarized in this informative booklet, the first such summary to be made. Its six parts are devoted to elementary mathematics, secondary mathematics, college math-

ematics, school mathematics (grades K-college), teacher training and National Science Foundation. Within each section, the work of the study groups concerned with that particular level is presented. The brief summaries present in outline form all pertinent data about each study group including sponsors, date of study, membership, procedure, purpose, results and recommendations, and the implications to be drawn from the results of the studies. Research for this summary was completed on June 1, 1959.

STUDIES IN MATHEMATICS EDUCATION. A Brief Survey of Improvement Programs for School Mathematics. Scott, Foresman and Co., Chicago. 56 pages. 50 cents.

COOPERATION

Schools and labor. Designed as a practical guide for labor leaders and union members who want to do something to help education, and for schoolmen who want this support, this 31-page booklet presents an outline of our school systems. After stating labor's past and present interest in education it provides a capsule summary of public school structure, the people who run the schools and the attitudes which influence them. One section is devoted to those attitudes and approaches to public education which make for the most effective, continuing working relationships with schoolmen. Two dozen examples are cited of organized labor and individuals already at work helping schools, and checklists are provided to encourage a labor-public school program for the community.

HOW DO LABOR AND SCHOOLS WORK TOGETHER? National Citizens Council for Better Schools, 9 E. 40th St., New York City 16. 31 pages. Free.

SCHOOL SAFETY

Fire protection. Outlines of various accepted procedures for maintaining, protecting, recharging and inspecting the most commonly used fire extinguishing equipment, are presented in this fire safety handbook. It contains

sections devoted to portable extinguishers and systems utilizing fixed high pressure carbon dioxide, fixed foam, and standpipe and inside hose. The mandatory and recommended procedures listed will prove helpful to all school persons concerned with the use of fire extinguishing equipment. A clear, two-color chart, "How to Select a Fire Extinguisher," suitable for display on bulletin boards, school lounge areas, etc., is available with the handbook.

F.E.M.A. HANDBOOK OF SAFETY CODES. Fire Equipment Manufacturers' Assoc., Inc., One Gateway Center, Pittsburgh 22, Pa. Free.

PURCHASING

Color materials. Designed as an aid to purchasing, this newly-revised booklet presents simple, practical tests to determine the suitability of color materials for classroom use. It will prove particularly useful to administrators and teachers who, though not artists or art specialists themselves, are responsible for the selection of color materials.

MAKE THE MOST OF YOUR COLOR MATERIALS BUDGET. The Crayon, Water Color and Craft Institute, Inc., 420 Lexington Ave., New York 17, N. Y. Free.

SECONDARY EDUCATION

Role of the high school. Flexibility is the key word in this study of the high school's role in the education of adolescents. The report strongly approves of the comprehensive high school which provides the student with a wide choice of courses and permits him to live and work with people of differing backgrounds. Ideally, this report says, the curriculum should be under constant scrutiny to keep it timely and dynamic. The school should offer the student a variety of experiences but his program should be tailored for him alone and for his individual talents and potential. One-third to one-half of the student's time should be spent on general education; the remainder should be used by him to develop his talents and to further his personal goals. While flexibility in courses is recommended, the student also needs an "anchorage" throughout his school career. This anchor may be supplied by a homeroom group that remains constant or a particular staff member acting as friend, guide and counselor during the four-year period.

THE HIGH SCHOOL WE NEED. Assoc. for Supervision and Curriculum Development, 1201 16 St., N.W., Washington 6, D. C. 28 pages. 50 cents.

ANOTHER WAY RCA
SERVES
EDUCATION
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ELECTRONICS



LANGUAGE IS SPEECH—WHY NOT TEACH IT THAT WAY



...with an RCA Language Laboratory

You soon hear results when you supplement classroom work with lessons that *talk*.

With an RCA Language Laboratory, each student receives tape-recorded lessons via a headset in his individual booth. There's more time for teachers to work individually with students—and a *spoken* language, not merely a written one, is learned.

With this goal foremost in mind, RCA specialists in sound have teamed with educators to develop a broadly diversified line of Language Laboratory equipment. Versatile RCA systems allow a teacher to: (1) Use as many as 10 lesson tape recordings simultaneously; (2) hear both the master tape and student's voice; (3) talk with any student in a two-way conversation; (4) monitor each student selectively; (5) record student responses on central tape recorder; (6) insert comments during this recording. For student recording, both standard

tape decks and new cartridge tape recorders are available for use in individual booths.

You can readily plan a Laboratory to suit individual preferences...a Laboratory flexible enough for use from elementary grades through graduate work. It's also easy to add to your RCA Language Laboratory or vary it to suit changing needs. RCA offers a lower price tag than most, thanks mainly to the simplicity with which RCA engineers have designed the equipment. All-transistor construction of the RCA Laboratory means minimum wiring; thus installation costs are kept at rock-bottom. For school purchasing convenience, a *lease-to-own* plan is available for your RCA Language Laboratory.

Your RCA Language Laboratory dealer helps you plan the system which best meets your requirements and costs you least. For his name, write Radio Corporation of America, Language Laboratory Sales, Building 15-1, Camden 2, New Jersey.



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(Circle number 727 for more information)

NEWS OF THE SCHOOLS

A digest of current happenings in public education

Ruling barring trips on school money fought

The Portland, Ore., school board has filed a test suit designed to upset a state attorney general's ruling that districts may not use school funds to send employees or board members out of the state.

The friendly suit will be filed in connection with a trip to Chicago taken by Superintendent J. W. Edwards. The board ordered Edwards to take the trip so that he could attend a meeting of superintendents of districts of over 200,000.

The board passed a resolution finding it "to the interest of the district" for the superintendent to attend the semi-annual meeting of large city superintendents.

A recent attorney general's opinion held that no school board member or employee of a school district could travel outside the state on district funds. The opinion was rendered in connection with the attempt by two districts to use district funds to defray part of the costs of their superintendents on a tour of schools in the Soviet Union.

Budget cut forces less fire protection

In the wake of the Chicago school fire, last December, a national magazine surveyed—through the National Fire Protective Association—the safety conditions in seven major cities.

The survey was taken in March and at that time the City of Pittsburgh was rated as poor in three of seven areas: alarm systems, fireproof interiors and enclosed stairwells.

The board and administration, aware of the problems, earmarked \$670,000 in a multi-million dollar budget for fire safety improvements. Then the blow fell. The Pennsylvania General Assembly (legislature), as part of a rural vs. urban fight, reduced the city's 1959-60 tax requests to 58% of the total sought.

As a result of that cut, Pittsburgh has been forced to cut its fire safety budget to just \$24,600. Only top priority projects were approved "because the lives of children are concerned."

Plans to rewire and relight boilers,

to put on new roofs and install new incinerators had to be dropped.

Of course the children didn't choose to live in the city or the country. But it is their lives that the politicians are gambling with.

School children lose to political ambitions

New York State's voters, by a margin of 350,000, made New York City's school children the latest victims of "politics" by defeating a badly needed \$500 million bond authorization. New York State laws let residents of the whole state vote on the big city's financial matters.

The bond issue became the field of

battle between two warring elements within the city's Democratic Party. Meanwhile, the Republican-controlled state house which, observers felt, was the only body influential enough to swing a majority of voters to the bonds, hardly lifted its voice.

The result of these political shenanigans was that the children—with neither a voice nor a vote—became footballs for the politicians. And like all footballs, they got kicked around.

Parent-teacher conferences blocked by state laws

Parent-teacher conferences are being eliminated in Westport, Conn., due to a strict interpretation of state attendance

Too good to miss . . .

Not sent . . . The draft board of Montpelier, Vt., decided not to send Teacher Donald L. Lindsley II, into the Army, after one of his students wrote a letter to President Eisenhower asking that he be deferred. The 12-year-old praised the teacher for "his proficiency in duties as principal, teacher and athletic coach." Lindsley got an occupational deferment. We like the idea.

No gent . . . Teacher Carl Sexton doesn't have the same kind of admirers. His problems started when he and three teen-age boys stood around one day watching a girl change a tire. "It seems to me you men could at least help that girl," boomed a woman's voice from a nearby house. Slightly embarrassed, Driver Education Teacher Sexton had to explain that it was just a part of the course.

Big dent . . . Taxpayers in Hotchkiss Hollow, N. Y., had nothing but a big dent in their pocketbooks to show after all the excitement was over. This community of 95—including 10 school children—was suddenly enlarged by the arrival of a family with six school-age children. Taxes were immediately tripled to supply a new school bus and tuition for the youngsters. Trouble is, the family moved back out of town. Now they're trying to figure out what to do with all that extra tax money. Any ideas?

Strange scent . . . Something smelled rotten to taxpayers in a low-income section of Houston, Tex., when the school board announced plans for the construction of two schools. One, a junior-senior high school for their children, was to have a combination cafeteria-auditorium. The other, a junior high school in a wealthy area was to have separate auditorium and cafeteria facilities plus a swimming pool. When the poorer residents complained they were told that a swimming pool in *their* section would cost 12 classrooms. The board finally compromised by agreeing to separate auditorium and cafeteria facilities for the poorer school—still no pool.

laws made by the state education office.

The Westport schools have been issuing just one report card a year in the elementary schools, substituting parent-teacher conferences for any others. But the conferences have cut into the school year so much, the state contends, that children are not getting the amount of schooling stipulated by law.

Under the conference system, classes were dismissed at noon for one week in the fall and another in the spring. Conferences were held during these periods. Students attend school four hours a day, but the state refuses to credit the district for a day's work for any of the time spent in school during these two weeks. As a result, the schools are failing to meet the 180-day minimum year.

Since the state board has refused to change its ruling regarding the half-

day weeks, and the district must meet the requirements to obtain state aid, the parent-teacher conferences are being dropped for the remainder of the current year.

Local board officials have announced their intention to return to the conference system next year. They hope to accomplish this by lengthening the school day or the school year sufficiently to be able to overcome state objections.

state regulations concerning the size of high school classes.

In an appeal to the state commissioner of education, filed on behalf of the teacher by the Teachers Guild, Franklin Smith asserted that the number of hours he taught each day, multiplied by the number of students taught, totaled 187, which is more than the state mandated maximum total of 150.

The suit was filed on behalf of Mr Smith and other teachers in the system "similarly situated." The appeal stated that academic high schools in the city were faced with "appalling conditions with respect to class size"; that increased student failures were a direct result of overcrowded classes; and that they "may well constitute a fire hazard, classrooms being occupied by numbers greater than safety standards permit."

A spokesman for the board admitted that most of the essential facts cited are correct but claimed that this was the result of a limited school budget. The board, he said, will have to do some "tall explaining why we've had this slip-back after years of progress."

Problems, problems, problems

A random look around the nation and the world has revealed this group of thorny problems being tackled by schools and school boards at the present time.

Petticoats . . . The school buses of **Charleroi, Pa.**, are overcrowded, not by too many students but by too many petticoats. As the transportation manager explained: "The girls won't let the boys sit beside them on the bus for fear their starched and frilly petticoats will get mussed." So the boys stand and the buses get overcrowded. A frill problem, we'd think.

Playing fields . . . The world-famous playing fields of Eton College, in **Eton**, where all England's great battles are won, were baked so hard this fall that they had to be closed after 35 students suffered fractured legs, arms and collarbones during two weeks of the soccer season. It was the first time in 520 years that such a decision had to be made.

Maternity leave . . . Can men anticipate birth? This natty problem is occupying the school board in **West Hartford, Conn.**, which has been discussing its leave of absence clause. When one board member claimed that the phrase "maternity leave will be granted to persons anticipating birth" was redundant, the superintendent countered by noting, "at least we took out the word 'women.'" And why can't a man

anticipate birth, asked a non-redundant board member? And so the debate rages.

Flag flying . . . To fly or not to fly the flag on holidays is a \$25,000 question in **Cincinnati**. State law requires the display of the flag on days when school is in session. Cincinnati likes to fly it on five holidays, too. But this, it seems, is costing the schools some \$5,000 in overtime custodial salaries for each of the five days. The question is: how do you drop the flag without seeming unpatriotic?

Boy meets girl . . . Perhaps the most perplexing problem is that facing college officials in **Karachi, Pakistan**. Pakistani co-eds, having won the right to uncover their faces, are now painting them with lipstick, eye shadow and the like. The new scenery has been driving the male students to distraction—so much so that Karachi University has just had the worst examination results in its history. After much consideration school officials have come up with a solution. Boys are forbidden to talk to girls on campus and may be fined \$1 for doing so. It hasn't helped much though. After all, how can you penalize looking?

Morning prayer plan dropped in St. Louis

A proposal to open each school day with a nondenominational prayer has been dropped in St. Louis. Board Member Daniel L. Schafly withdrew his proposal because it had caused too much tension and controversy in the community.

Opposition to the prayer plan was led by the Reverend O. Walter Wagner, executive director of the Metropolitan Church Federation. Dr. Wagner's opposition was based on his belief that "the home and church should be solely responsible for the prayer habits of children."

Students organize to cut failures of fellows

A student-inspired move on the campus of the La Jolla, Calif., high school has resulted in higher academic grades and continued eligibility for many of the school's athletes.

The Society for the Prevention of Low Grades to Athletes—which was *continued on page 28*



known

**fact: any bucket of cleaner
starts losing its power as
soon as you put a dirty mop
or sponge in it! but now...**

TURN PAGE

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other
cleaners
fade
and fade
and fade
and fade
and fade

JOHNSON'S FORWARDTM CLEANER



**STOP
POWER
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Announcing! the cleaner that gives you a full bucket's worth of cleaning power every time!

Johnson's FORWARD...never suffers power fade-out. Even when it's loaded with dirt you know its cleaning action isn't giving out!

Now, try FORWARD and see what it means to get all the cleaning power you pay for! Call your local Johnson's Wax Distributor...or write S. C. Johnson & Son, Inc., Service Products Division SM-12, Racine, Wisconsin.

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later expanded to give aid and comfort to those who could neither pass classes nor footballs—was formed by the students of the high school who considered themselves academically able to help out in an emergency.

In order to protect the innocent, and encourage classmates to apply, those students who feel in need of academic aid need only drop their name, address and telephone number in a specially designated—and locked—locker. Members of the Prevention Society open the locker, divide up the problems and call at home those who have asked for help.

The group has a faculty advisor who, fortunately, teaches such diverse subjects as math, English and social studies.

their school time at Democratic, Republican or board of elections headquarters.

Students are given the opportunity to throw their usual "embarrassing" questions at the politicians and, more important, they actually participate in each organization's political work.

The seniors have handed out leaflets, answered telephones, rung doorbells and helped in the preparation of campaign materials. Parents of each of the seniors have given permission for the visits. "There seems to be a lot of enthusiasm by the parents and kids," says Teacher Richard Streb. "There's a feeling by both of them that it's a good thing that can't hurt."

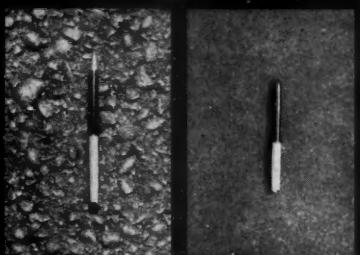
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Iowa educational quality to be rated by computer

An electronic computer will be put to use by Iowa's Department of Public Instruction to determine which of the state's schools are good and which bad.

The computations are being made with a \$50,000 grant under Title 10 of the National Defense Education Act. The title provides up to \$50,000 a year in federal matching funds to help state education units improve the quality, reliability and speed of collecting and reporting educational information.

It will take three years to put Iowa's plan into full operation, according to Paul Johnston, assistant superintendent. The plan is to obtain information from each school district in the state on teacher training and experience, class size, course offering, building and equipment facilities, and finances.

This information will be coded for electronic computers and weighed together by a formula to produce ratings of the quality of education in each Iowa school.

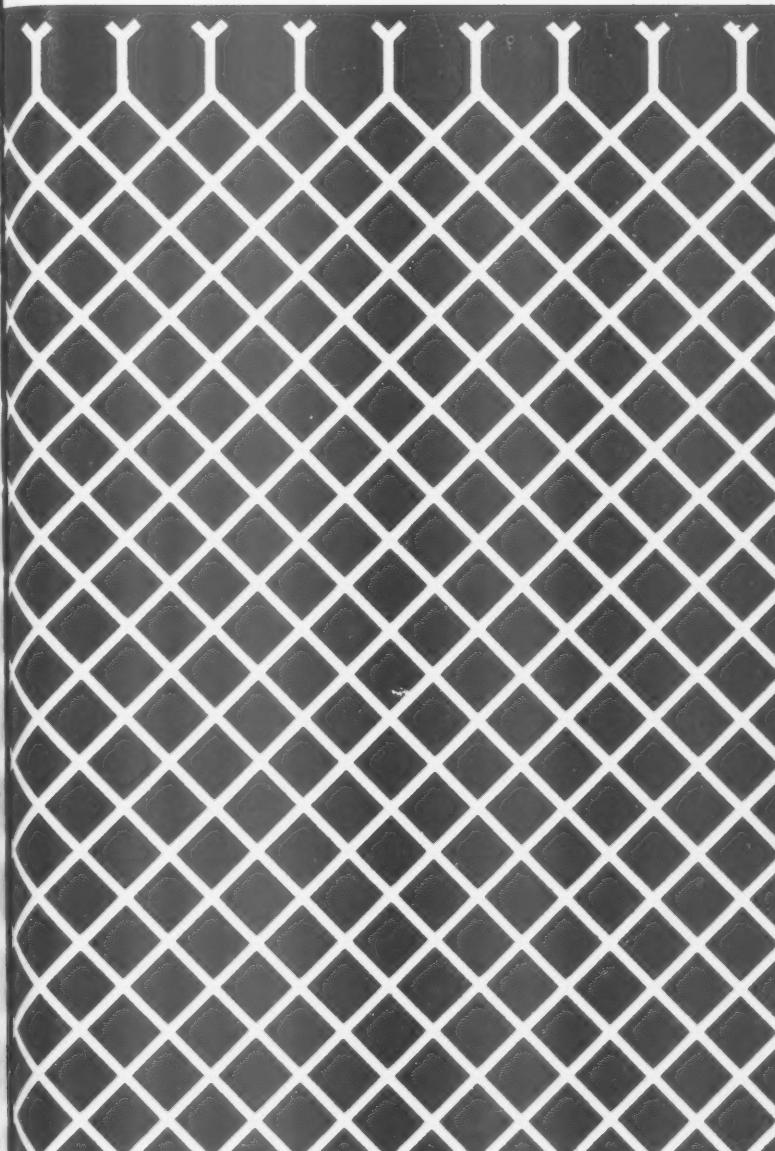
The Iowa program was highly praised by James E. Gibbs, Jr., chief of the U.S. Education Office's state school system. "If what Iowa is doing were adopted throughout the nation," Gibbs said, "the aims of Title 10 would be met."

High school students ask for shorter day

High school students in Jeanette, Pa., are demanding a shorter school day—and their superintendent thinks they should get it.

Students at the high school have
continued on page 33

How to give your property lasting fence protection



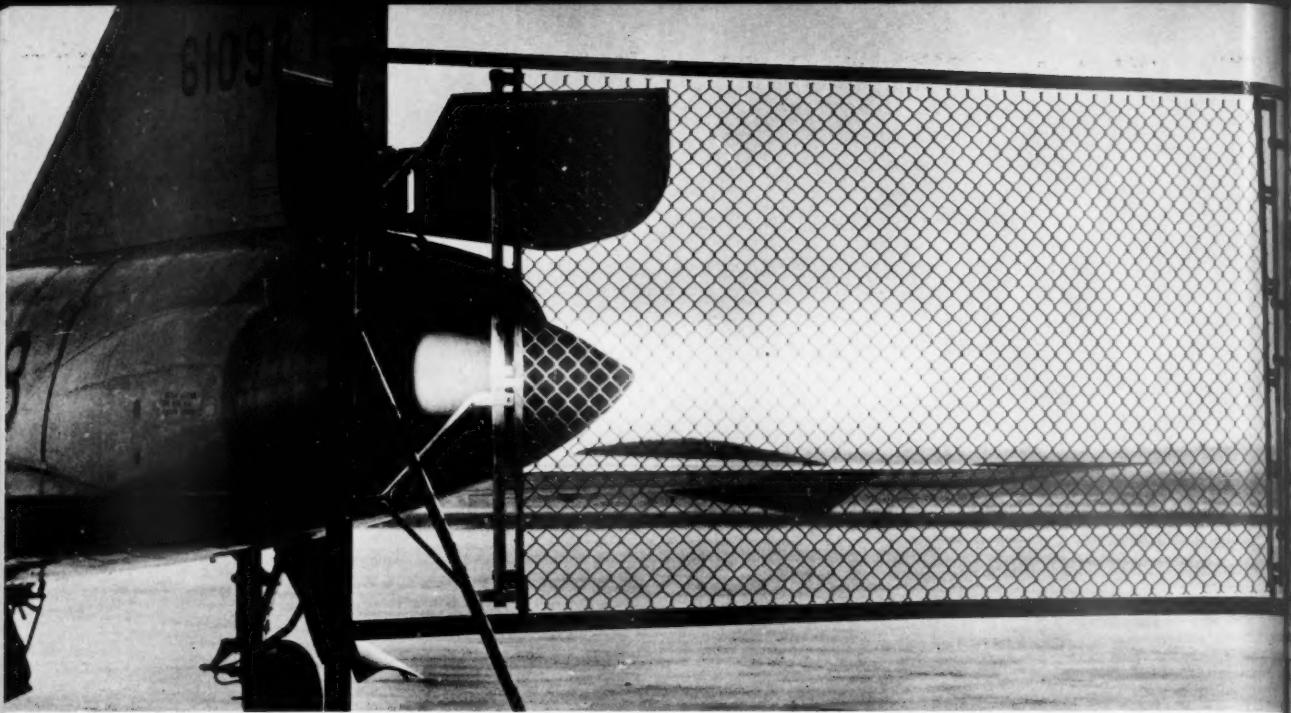
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USS Cyclone Steel Fence can give this type of protection because it's built to last. The woven chain link fabric is heavily galvanized after weaving to resist corrosion. The posts are rugged. They won't heave with frost or fall with shock or impact. And the gates are balanced to open and close countless times without dragging.



For more proof of Cyclone's excellence, see what happened when special panels were subjected to gruelling tests.





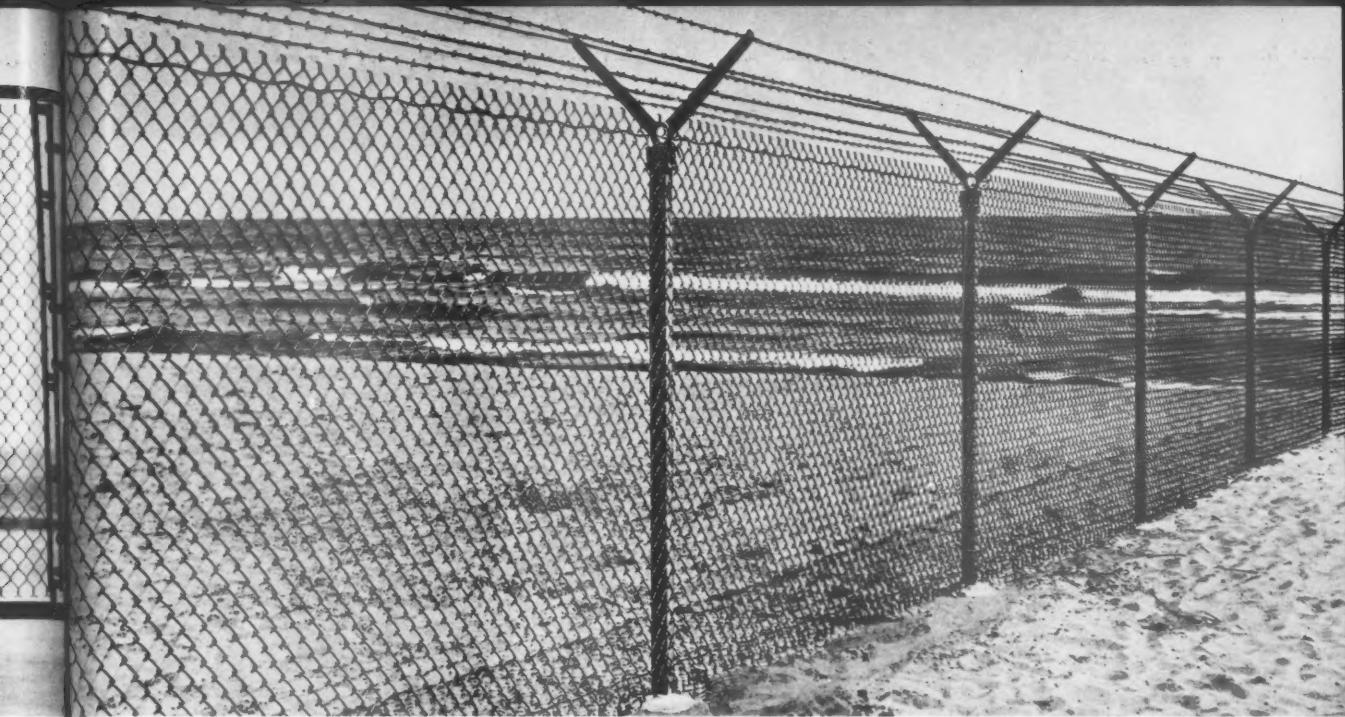
Cyclone withstands the furious heat from a jet fighter plane

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powerful force of that hurtling car damaged the Cyclone Fence beyond usefulness.

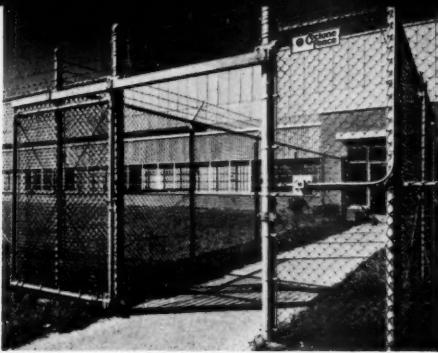
Isn't this proof that USS Cyclone Fence would be the best investment to protect your plant, school or other property?



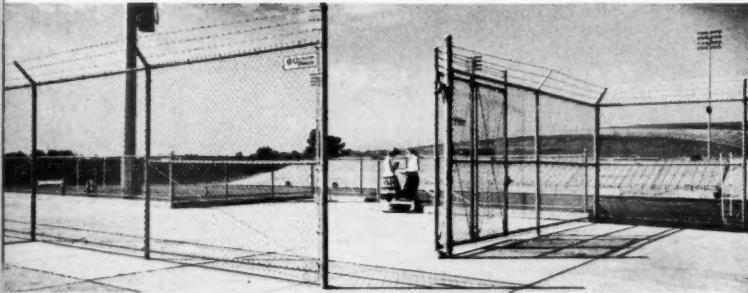
... scouring fire from a military flame thrower

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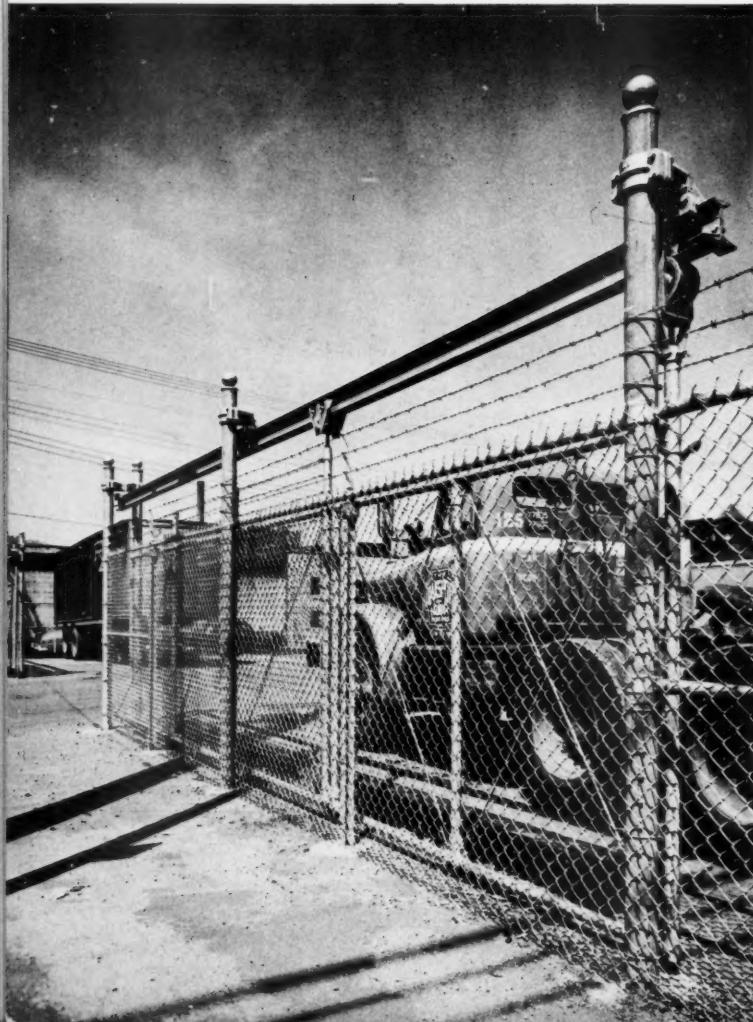




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petitioned the school board to shorten the day by 40 minutes. The students, who moved into a new building this fall, found that their traditional 65-minute lunch hour had been shaved to a mere 26 minutes and that they were being asked to stay in school until 4 p.m., 40 minutes longer than before.

Superintendent Henry W. Pharaoh has indicated substantial agreement with the sentiments of his students, contending that they are showing signs of "mental fatigue" during the final period of each day. Pharaoh has suggested that each period be cut from 46 to 41 minutes.

The dispute revolves basically around an interpretation of educator-inspired demands for more schooling. According to the majority of the school board, which instituted the longer day, this means schools should be in session more hours daily. Superintendent Pharaoh has argued that longer school years, not days, are more to the point. The Jeanette school day is the longest in the area.

State study critical of school objectives

A two-year study conducted by 2,000 interested persons in Connecticut, 75% of them laymen, has revealed that most of the state's residents want the schools to concentrate more on "a good education" and less on supplementary services.

Among the latter is included driver training which the residents seem to feel should be eliminated or made an after-school subject. The study was supported by the Ford Foundation.

In order of importance, the Connecticut Yankees said that the primary responsibilities of the schools are teaching English, mathematics, science, history and other social studies, and foreign languages.

Priority ratings for art, music, health and physical education, industrial arts, homemaking and business education were also advocated.

More than half of those participating supported public kindergartens and adult education courses. A sizeable group also advocated establishing 13th and 14th years of school.

Teacher suspended for refusing lesson plans

A debate on the rights of a teacher to refuse to submit lesson plans two weeks in advance has led to the sus-

pension of the head of the English department in the Fox Lane High School of Mt. Kisco, N. Y.

Teacher James R. Worley, who has taught at the school for eight years, was suspended by Principal Arthur B. Shedd when Worley refused to relent in his position.

Teachers at the school were ordered last year to submit lesson plans five days in advance. Worley complied with this ruling, he said, because he did not feel it was a serious enough incursion on teachers' rights to warrant a refusal. This year, when the two-week ruling was set down, he refused to comply.

Worley said teachers consider such lesson plans a farce and suggested they were being asked for them only to impress an accrediting agency that will visit the school next spring.

Teachers in Mt. Kisco's two other high schools are not required to submit lesson plans in advance, though they do turn in a plan of course work for the whole year.

Worley's suspension was for 30 days with the possibility that the board will dismiss him. Since he has tenure at the school, the case would then probably be appealed to the state board of tenure.

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Does Federal Aid mean Federal Control?

When the Cincinnati school board rejected aid under the National Defense Education Act, the majority said they feared the beginning of federal control of their schools. In this tape-recorded interview, Lawrence G. Derthick, U.S. Commissioner of Education, discusses Cincinnati's three main objections.

■ ■ ■ Is it possible to make a wholly objective appraisal of federal aid? Probably not. For more than 10 years the issue has been fought pro and con in states and local communities as well as in the Congress of the United States. Powerful and well-organized groups have taken opposite sides. The basic issues have been obscured—and both sides have been, and are, equally guilty of contributing to the confusion.

Pro forces favoring support, rest their case on one fundamental issue after all the methods and means have been stripped away. They say: all children in the U. S. do not have equal educational opportunity because some states and some communities won't—or can't afford to—provide education of high quality. They insist that universal education has thus been thwarted and that the U. S. Government has the solemn duty to meet the imbalance. Lately, with an eye to the cold war, they have added to their basic argument the importance of education in national defense.

Con forces resisting federal support, have an opposite and equally compelling argument. They say: Education in the U. S. is better supported financially than anywhere else in the world—including Russia. They point to the fact that since 1900 enrollments have doubled, national income has risen 25-fold, and school expenditures have multiplied 60-fold. They argue that ineffective use of funds—not lack of them—is responsible for our educational shortcomings. To this they add the threat that federal support will ultimately mean federal control—a result abhorrent to both the PROs and CONs.

Both arguments can be effectively countered. It is not the purpose of this article to further contribute to the basic battle.

More pertinent is the fact that for many years there has been, in various ways, federal partnership involving cooperation with educational agencies. The National Defense Education Act of 1958 is typical. To a limited degree, it can be examined as a case study of the fundamental question: "Does federal aid mean federal control?"

Federal aid vs federal support

It is important to recognize at the outset the very real difference between support and aid—for the NDEA is aid, not support. James McCaskill, an official of the National Education Association, which strongly favors support, presents these categoric differences:

Federal aid is intended to stimulate educational activity rather than to underwrite it for a long period of time.

Federal aid is usually directed to a special area rather than to general educational purposes.

Federal aid tends to be remedial rather than fundamental.

Federal aid tends to deal with emergency problems rather than long-range problems.

Even acknowledging that these differences may have been oversimplified by the NEA, it can be said that this country has taken a firm step in the direction of federal partnership in problems that, heretofore, have been considered as state and local. To that extent, after over a year of operation, it should be possible to probe for evidence—pro and con—that federal aid involves federal control.

In the following tape-recorded interview, Dr. Lawrence G. Derthick, U. S. Commissioner of Education, answers SCHOOL MANAGEMENT editors' questions about federal control under the NDEA.



DR. LAWRENCE DERTHICK

Q *Last June, the Cincinnati Board of Education, by a four to three vote, rejected almost \$200,000 of federal aid. The majority gave three reasons. First, they said it was the first step toward federal control of their schools. Second, they said they were able to handle their own needs without handouts. Third, they pointed out that they would only get \$1.95 for every \$100 they contributed in federal taxes. Can we examine these arguments one at a time?*

DERTHICK: Yes. But first, let's get our facts straight. Federal aid isn't anything new. Federal aid is older than the constitution. The Land Ordinance of 1785 and the Northwest Ordinance of 1787 and the Land Grant College Acts are examples;



Provisions of the National Defense Education Act of 1958

Title I—General provisions. Presents Congressional findings and policy declarations; prohibits federal control over curriculum, instructional programs, administration or personnel of the public schools; and defines the terms used throughout the act.

Title II—Loans to college and university students. Provides for federal contributions to the establishment of student loan funds at colleges and universities so that qualified, needy students can borrow money at low cost, over long term from the colleges.

Title III—Funds for strengthening science, mathematics and modern foreign language instruction. Provides grants to state educational agencies and loans to non-profit private schools for:

1. The purchase of laboratory and other special equipment for science, mathematics or modern foreign language teaching in the public schools.
2. The minor remodeling of laboratory or other space used for such equipment in these schools.
3. The expansion or improvement in the public schools of supervisory or related services in science, mathematics and modern foreign language programs.

Title IV—National defense fellowships. Provides additional fellowships in university graduate schools, particularly for students interested in college teaching.

Title V—Guidance, counseling and testing. Authorizes grants to state educational agencies to help establish and maintain programs of testing, guidance and counseling in secondary schools.

Provides assistance to colleges and universities for training institutes to improve the qualifications of counseling and guidance personnel in secondary schools.

Title VI—Language development. Establishes centers for teaching modern foreign languages—and related information about countries involved—not generally taught in the U. S.

Provides for advanced training institutes for public school teachers of modern foreign languages.

Title VII—Research and experimentation in educational media. Encourages the use of television, radio, motion pictures and related materials in teaching programs through grants to public and private groups to determine how these materials can be put to better use in the schools.

Title VIII—Area vocational education programs. Assists the states in developing and improving their area vocational education programs for training skilled technicians in fields vital to national defense.

Title IX—Science information service. Creates a Science Information Service for the improved dissemination of scientific knowledge through the use of indexing, abstracting and translating.

Authorizes the study of new, improved methods of making this information available.

Title X—Improvement of statistical services of state educational agencies. Authorizes federal grants to states to help them improve and strengthen the statistical services of their educational agencies.

or, look at the Vocational Education Acts. They are a little more than 40 years old and, again, we have federally assisted programs operating in education without interference. In fact, to cite a more recent example, we have the case of Public Laws 815 and 874 whereby the federal government gives aid to local school districts suffering a federal impact, such as a tremendous new air base that suddenly pours thousands of children into the local school district.

A doctoral dissertation done at Columbia University about two years ago reflected an investigation into the more than 3,000 participating school districts to determine whether there was any evidence of federal control.

The superintendents who responded to the questionnaire indicated almost without exception that there was no evidence of federal control accompanying the federal assistance provided under these programs.

Q. Dr. Derthick, speaking practically, is it possible not to "control," to some degree, when you set standards? Isn't the very idea of the Office of Education *approving* something a form of control?

DERTHICK: Not really. Take the National Defense Education Act. As you know, it is administered according to plans evolved by each individual state. But it is an Act of Congress. So, Congress, representing all the people, declares the intent or purpose of the legislation. In the case of NDEA it was to strengthen education at critical points in the national interest. To consider one example, there is a provision for strengthening science, math, and modern foreign language programs. Now, what you are suggesting is that when Congress directs the money toward science, math, and foreign language—instead of history and English—you have a form of federal control. We don't think so. The national interest is at stake. In defining the national interest, Congress simply stimulates a state to point its efforts at a given time more specifically to meet urgent national needs and opens the door for the state to ob-

"I know that a great many communities are not supporting education to the maximum of their abilities."

tain assistance if it elects to do so.

If the choice is to participate, to qualify for federal aid the state simply prepares a plan designed to carry out the intent of Congress—a plan that also is in harmony with the state laws and procedures. There's no compulsion. The Office of Education merely serves in a consultative role in helping the states design that kind of a plan. When the plan is approved, it is up to the state to employ personnel, establish regulations, and otherwise administer the program. The state may choose to ask our advice on curriculum and program matters. It can take that advice or not, as it wishes. You're right when you say that the law lays down certain purposes for which the money is to be used. But these are not standards set up by the Office of Education. They reflect the purposes outlined by the representatives of all of the people in Congress assembled. The state, through its plan, indicates the guidelines whereby the local districts and all concerned may work together to achieve those purposes within the framework of state administration. Obviously the state would expect each local district to adhere to its own state plan.

Q. But what about the unwritten law—the administrative decisions that will be applied later if a state becomes involved in a federal aid situation?

DERTHICK: Let's take an actual example. We have been asked our opinion as to whether the purchase of general classroom furniture would qualify in terms of strengthening science, mathematics, and modern foreign languages. Remember, now, that the state under its plan has a primary responsibility for pinpointing its efforts toward the objectives of the legislation. Naturally, the state is anxious to



employ its best judgment, drawing also upon the experience and practices of other states as well as seeking consultation from the Office of Education. We, on our part, are likewise anxious to find the best answers and to reply to such inquiries with good advice so that the state may fulfill its obligation to the highest degree. In this case we expressed the opinion that the purchase of general classroom furniture would be inconsistent with both the language and intent of the Act. As we work back and forth in our consultative role with the professional leaders of the states, we learn much from each other. Policies and guidelines evolve in this process and are adapted and applied by the states.

Q. Dr. Derthick, the Defense Act has been in operation for some time now. Quite a few grants have been made. Have you had any complaints, yourself, from local school districts that have applied for aid?

DERTHICK: While we have no record of complaints of federal interference from local school districts, this is really not pertinent because this office deals only with the state agencies.

Q The four members of the Cincinnati school board who voted

against federal aid said that they felt they were able to pay their own way. This was one reason why they did not want to accept it. Isn't this really in the best American tradition? Doesn't federal aid more or less encourage a welfare state kind of psychology at the local level?

DERTHICK: Let me answer you this way: Dr. James R. Killian, formerly the President's special advisor on science, and presently chairman of the board of Massachusetts Institute of Technology, in his testimony before a Congressional Committee, called attention to the fact that, in an age when mathematics is an essential ingredient to our survival, we are in danger of becoming a nation of mathematical illiterates. We have found, even in some of our most favored states, economically, a substantial shortage of math teachers. A large number of positions are filled with teachers not adequately qualified for instruction in mathematics. In such a situation, with our national welfare at stake, the country cannot wait until 50,000 school districts go ahead and do something on their own. We need

concerted action. We just can't wait in times like these.

Q. Then you disagree with the Cincinnati board's action?

Let us remember that the intent of assistance under NDEA is the selective identification of problems that need attention. In other words, NDEA is supposed to stimulate states and local school districts to meet these national needs. It has been reported that communities in several states have indicated that they are in sympathy with the NDEA program but feel there are other communities more in need of assistance. In the case of Cincinnati, I think the board acted in the very best American tradition. There are certainly many communities in the State of Ohio that do need the money that Cincinnati did not elect to accept. It is quite in accord with the spirit of the NDEA that the Cincinnati funds be shifted to districts where the need is much greater. At the same time, I do not concur in that part of the board's reasoning which would decline the money on the ground of federal control. After all, the public schools of Cincinnati have been cooperating in federally aided programs for a great many years. I have never heard cited any instances of federal interference in the operation of federal aid to education in the Cincinnati schools.

Q. Are you implying that some of our poorer states will not be able to afford, in the near future, to do an adequate job in providing an educational program of good quality?

DERTHICK: There are states in which people would have to make an effort three to four times greater than the effort made by people in the most favored states in order to provide an educational program of comparable quality.

The question is, can we reasonably expect the less favored states to try three to four times harder than the people in the most favored states to provide the quality of education for their children demanded by the national welfare? Yet the youngsters who go to school in those states are just as important as the youngsters anywhere else. Moreover, as adult citizens many of them will be found scattered

throughout the country so that a more favored state will often suffer from the educational limitations of the less favored states. Youth is a national resource wherever it is found, and it is urgent that all be as well educated as possible. In our kind of world we can't hope to compete in numbers; we must compete in quality.

Q. You indicated that some states might try much harder and still not be able to achieve the educational program of a more favored state because they don't have the money behind them. It can be argued, however, in answer to that, that the general cost of living is lower in a poor state and that it really costs less to educate children there. For example, teacher salaries are the major portion of the budget. Teacher salaries are lower in those areas, just as building costs are lower.

DERTHICK: I would suggest that the person from the more favored state who holds that point of view live for a year in one of these other states. It is true that some living costs are lower in the poorer states. Housing, for example, might be cheaper, but not that much cheaper. The same statement could go for groceries and clothing, though standard brands certainly cost as much wherever you find them. And I see the same kinds of supermarkets in all states. As for the lower salaries of teachers, that is a shame and a disgrace. It simply means that the poorer state cannot attract and hold as many good teachers. This means a poorer quality of education generally, because

it is a well-known fact that many experienced and well-qualified teachers migrate from a state paying low salaries to a state that pays better, leaving more of the less qualified behind. The children suffer, and those teachers who are well qualified and who are faithful and loyal to their home states are paying the bill that all citizens should share.

Q. Do you feel most states and communities are supporting education at the maximum level of their abilities?

DERTHICK: No. I know that a great many communities in this country are not doing their part. In a community where you have citizens who are active in public affairs, who are well informed, who know their schools and are sensitive to the needs and problems of those schools, almost invariably you have local support proportionate to the community's financial ability. In communities, all too many, where we don't have active citizen interest, almost invariably the school support is less than the community is able to provide. And so I think much must be done in this country to stimulate the community to do its share and to make certain that the state likewise is doing its share. The people of this country will ultimately have to determine just what are the proper shares for the local, the state, and the federal governments. And when that determination has been made to the satisfaction of enough people, then I certainly would advocate the federal government doing its full share.

Q. There has been a proposal made that if a further federal assistance program is undertaken, something beyond NDEA, that some measurement should be made of local effort after a few years. It suggests that the federal government not continue to hand money to people who are not themselves doing their part.

DERTHICK: I'm for that.

Q. Do you think it is possible to measure accurately the effort that a community is making?

DERTHICK: I think that through

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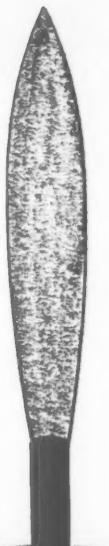
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Most people agree that all children should have a hot school lunch, but often the expense of equipping individual kitchens at each school is prohibitive. Central kitchens may be the answer to this problem—if you plan ahead.

a better way to keep lunch costs down

By RICHARD FLAMBERT

Partner
Flambert and Flambert
Food Service Consultants
San Francisco and St. Louis

■ ■ ■ During the past 10 years many school districts have introduced central kitchens to keep food costs down. In the West, particularly, this idea of using one big kitchen to serve several schools has found marked acceptance.

In theory, central kitchens are able to curtail costs by creating savings in purchasing, accounting, storing, quantity food preparation and serving. But theory doesn't always work out in practice. The necessity for designing, building and equipping a large kitchen, and the expense of purchasing carts and trucks to transport the cooked food to individual schools for service (and frequently having small kitchens and several employees on the receiving end) have, occasionally,

proved more costly than putting kitchens in each school. It's a tricky operation. But the rewards in a well-conceived central plan warrant close study.

Advantages available

What are some of the advantages of a central kitchen? Among the chief ones are:

Closer supervision. One specially trained person can be responsible for all phases of purchasing, receiving, storing, preparation and transportation.

Quality control. Quality and uniformity of prepared food can be more easily effected.

Greater efficiency. Only one staff needs to be organized and trained to do a job properly. The unevenness

What's wrong with central feeding?

Editor's note: We have asked Author Flambert, as an avowed advocate of central feeding, to present his answers to nine common objections that educators and others have voiced concerning central kitchens. His reactions are given below.

OBJECTION: All food is the same. All children must eat the same food, with no choice.

Flambert: There should be sufficient variety in the meals to provide the children food they like on most occasions; but it is difficult to allow free choice with a 25- to 30-cent plate lunch and still meet food and payroll costs.

OBJECTION: No special dishes can be prepared for the teachers.

Flambert: It must be remembered that the school lunch program is for children, not for the faculty. Nutritious food for children is just as good for adults, who are generally given larger portions for slightly higher prices.

OBJECTION: Many receiving schools have the same amount of equipment as regular kitchens.

Flambert: This is frequently valid. The fault, however, lies in planning. In a well-planned feeding set-up (see article), this will not occur.

OBJECTION: Food is slopped in transportation.

Flambert: This is seldom true any longer. In the first place, the carts are held rigidly in the trucks so that practically no swaying or jolting occurs. In the second place, the preparation of items such as soup has usually been discontinued.

OBJECTION: Children are unable to experience the appetizing odors and friendly, affectionate attention generally afforded by individual school cafeterias.

Flambert: This could be valid; however, most contact with children is established at serving time under any circumstances.

OBJECTION: Frequently central kitchens are installed in districts where completely equipped kitchens are operating and where habit patterns have already been set. This results in disappointment and resentment.

Flambert: This is true. There is no point in installing a central kitchen in a district where individual kitchens are working satisfactorily.

OBJECTION: Frequently the receiving schools over-order, and leftover food is either given to the children as seconds or thrown out.

Flambert: This is a matter of cooperation. There is no justification for waste at any time.

OBJECTION: Existing receiving schools' food service areas are usually not designed to receive carts and other means of transportation. Remodeling is expensive.

Flambert: This is generally valid; however, the use of carts is not compulsory, and in most cases other means of transporting food can be worked out. It is obviously better for a central kitchen to be set up in a school district where no kitchens exist than to try to solve the increased cost problem by building a central kitchen in an area where kitchens already exist.

OBJECTION: It is impossible to mass produce food and have it taste homemade.

Flambert: It is the duty of kitchen planners to avail themselves of all information regarding technological changes made in methods of production and in equipment. When proper supervision and care are given to food production, this criticism is not valid. It must be remembered that no two cooks or managers get the same results, and many children are penalized in individual schools because of inferior cooking. A central kitchen can eliminate this.

of multi-kitchen personnel is eliminated.

Reduced cost. It costs less to produce in large quantities and waste can be held to a minimum.

Menu research. Individual schools have neither the facilities nor the time to plan new dishes or to take advantage of modern technological changes.

Equipment and space saving. Where receiving schools are given a minimum amount of equipment with which to serve, savings are also effected in less space requirements.

Reduced payroll. When planning is done intelligently, fewer man-hours are required to plan, produce and serve the food.

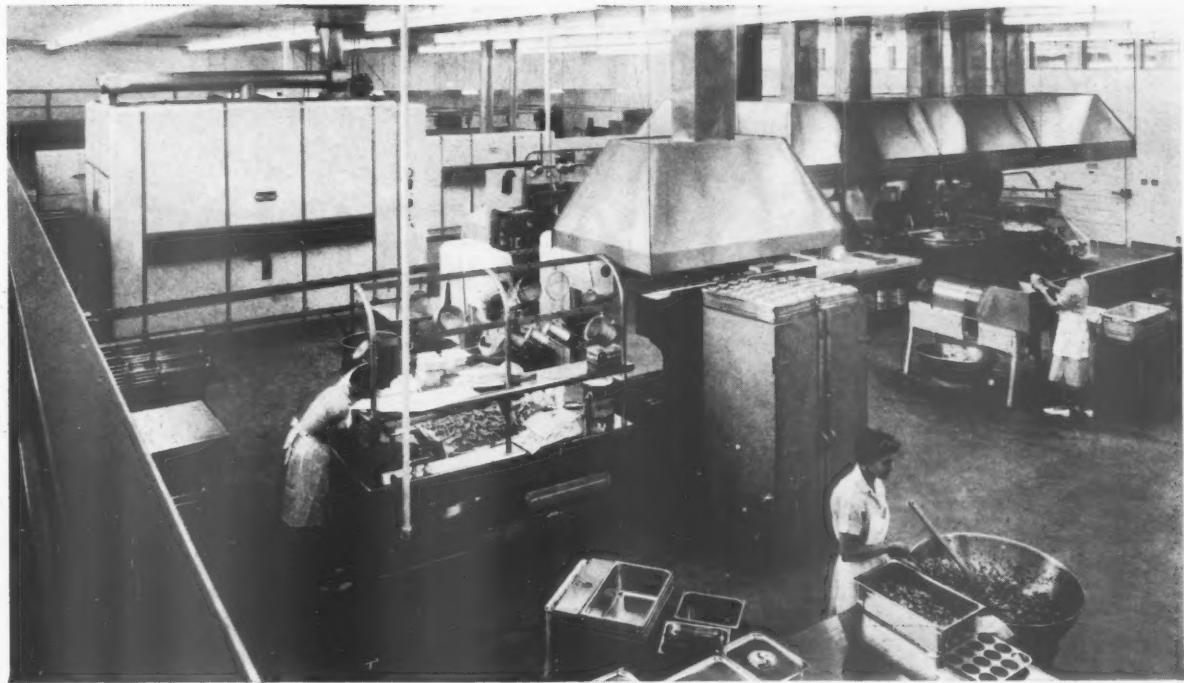
Needs careful planning

The establishment of a central kitchen requires thorough planning. That is the stumbling block in most unsuccessful attempts. It is necessary, first, to forecast accurately the maximum requirements from the standpoint of number of schools, size of student bodies and percentages of participation. In some districts participation in the food service program may be as low as 25%. In others, it may reach 90%. You can't plan facilities intelligently without a good forecast of how many you'll feed and where they'll be fed.

Location is sometimes a problem. In some areas it might be better to have a separate building in the center of the district rather than locate in a school. In others, it will be better to build a central kitchen in conjunction with a proposed secondary school. In some districts one central kitchen will do for the entire school system. In others—where a large territory is covered—it might be better to build two or even more central kitchens. Once a central kitchen has been decided upon and a location set, it is necessary to set a menu pattern and to determine whether the program should be part of the government "A" lunch program.

Get 'em while they're hot

The type of transportation that will be used to get the food from the central kitchen to the receiving schools will depend on the menu, the location of the schools, and the number of meals to be served. At



present there are four main methods generally used:

Vacuum cans. Food is taken directly from the ranges, ovens and refrigerators and placed in pans which go into vacuum containers. In the receiving schools the food is transferred to hot and cold sections of a serving table. The two main advantages of this system are that food is kept hot or cold, and the use of food carts in transportation is unnecessary. But the amount of time used in transferring food from one type of container to another and the need for a serving table are disadvantages to this system. In spite of this, districts using the vacuum-can method seem to be generally satisfied.

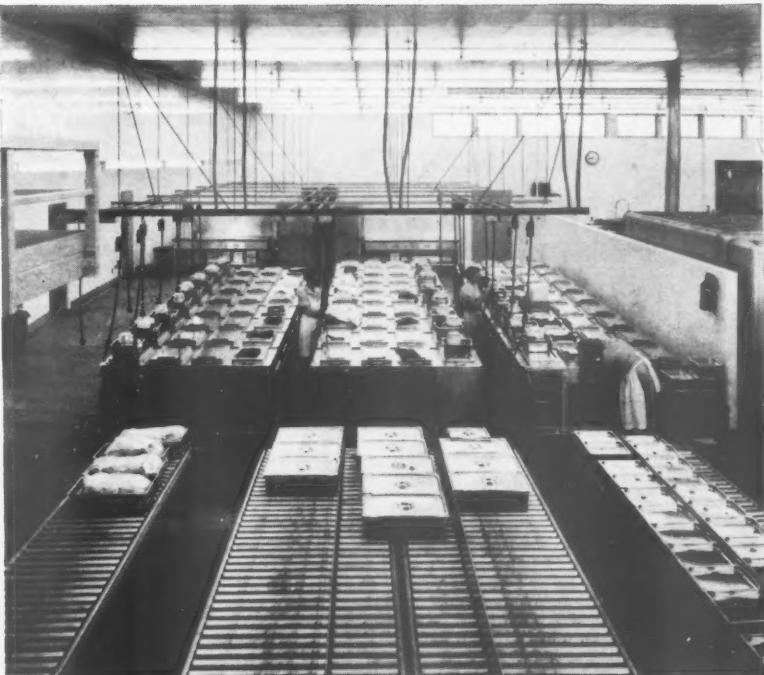
Boxes and ordinary containers with tight-fitting lids. Food is simply put into the boxes, pans or pots and transported to the schools, where the pans and pots are placed on the serving table. For short hauls this method can work, but too often food has to be reheated in the receiving schools.

Carts with hot and cold compartments. One section of the cart holds approximately 20 trays in which cold food is placed in the central kitchen. The hot section contains pans of food. At the receiving school the compartmented trays are removed

continued on page 78

▲ **Central kitchens** should be planned so that steps and time are saved. Time, motion studies are recommended.

▼ **Modern labor-saving equipment** will do much to insure the success of any central kitchen program.



The great grab bag

GOVERNMENT

Your school district has but to raise its hand to participate in one of the biggest assistance programs in history. Here are the facts.

■ ■ ■ A \$7,500 lathe is being sold for a few hundred dollars. Duck cloth can be purchased for pennies a yard. Lab equipment, binoculars, typewriters and parcels of land are available for just a fraction of their original cost. Interested? These bargains are offered, almost exclusively, to you.

For over 13 years, the federal government has been donating surplus materials to the public schools. The schools pay service charges which cover transportation, packing, handling and paperwork costs. These may run to about 5% of the original acquisition cost of the surplus material. All too few school districts have participated. It's reasonable to ask, "Why?"

Officials who administer the program attribute the general lack of interest to "poor communications." This is undoubtedly true. The burden for informing the local district rests with each individual state's agency for surplus property. Some states have been much more aggressive than others in going after this great windfall.

But even in states that are doing a good job of keeping their local school districts informed, there has been an attitude of indifference among some local school officials which can only be attributed to laziness. It's safe to say that there isn't a single school district in the United States that could not use, to great advantage, some of the mate-

rials available. Moreover, the effort required on the part of the local school official is so minimal that "not worth the effort" is hardly an excuse.

What is available?

The number of items available to schools, practically free, runs into hundreds of thousands. The list ranges from modern scientific laboratory equipment to truck trailers; from office machines and furniture to large power generators; from expensive cameras and audio-visual equipment to power tools.

The full scope of the offering can only be appreciated when one considers how this material becomes "surplus." Typically, an agency or department of the federal government will find that a major change in its program requirements (or a reduction in its operations) puts the agency in the position of owning more real or personal property than is required. Some of the items prior to being determined surplus, will be reported to the Department of Defense and to the General Services Administration to see if other branches of the government can use them. Other items are not subject to this screening. Within reason, however, every effort is made, prior to the determination of the property as surplus, to find a government taker. The next best thing is to make it available to schools, hospitals and civil defense agencies. Finally, if no

AUDIO-VISUAL

"X" marks the spot on a variety of audio-visual equipment picked up as surplus property by Cornell University.



SURPLUS

WHAT'S AVAILABLE

WHO TO CONTACT

WHERE TO APPLY



CURRICULUM AIDS

Television set and test equipment was acquired by Philadelphia's Dobbins Vocational High School from surplus program.



VOCATIONAL MATERIALS

Universal drill press was too big for door. Purchase saving justified tearing down and rebuilding wall to get it in.



MAINTENANCE

Entire maintenance department shop at University of Pennsylvania was equipped with surplus valued at \$200,000.



TRADE SCHOOL NEEDS

This \$7,500 lathe was purchased by a New York City trade school. Cost to the school: a few hundred dollars.

one wants it, it is sold on the open market.

Ironically, many schools have purchased from surplus property middle-men, items which were available virtually free directly from the government, only a few months earlier.

A good example of an item that is currently choking the pipeline of government distribution is about 14 million yards of cotton duck cloth. On the surface, this may appear to be less than attractive to a school district. But, with a little ingenuity, valuable applications can be developed. For example, it makes a perfect covering for gym floors to protect their highly-polished surfaces during public meetings, exhibitions and similar activities. Some school districts have used it in their home economics departments, where it is being sewn by students into interesting and practical end products, such as tote bags, laundry and duffle bags, basket liners, stage drops, art canvas, etc. School maintenance departments find it useful for drop cloths during painting and plastering.

For any school system which maintains a vocational training program, there is an abundance of machine tools, shop equipment, hand tools and electronic test equipment

—often of a better quality than the school could ever hope to afford. A current offering, in this category, is an oscilloscope that cost the government \$150. A school can acquire it, as surplus, for about \$5.

There are two ways to find out what's available. Many of the state distribution agencies publish periodic lists of materials that have been allocated to them by the federal government. But, since it is normally impossible for the state agencies to maintain complete lists of the thousands of items available in their warehouses, school officials are invited to visit the warehouses at intervals in order to inspect, select or make their requirements known for property which is needed.

If your district is interested in investigating the potential, here are the three simple steps required:

1. Contact your state surplus property agency. (*A complete list of agencies is on next page.*)

2. Make arrangements to send a committee (including science teachers, maintenance personnel, and business officials) to your state surplus warehouse to see what they have on hand and what they expect to receive.

3. Make up a list of the equipment and materials you could use

and leave it with your state agency so it can be on the lookout for the things as they become available.

How much does it cost?

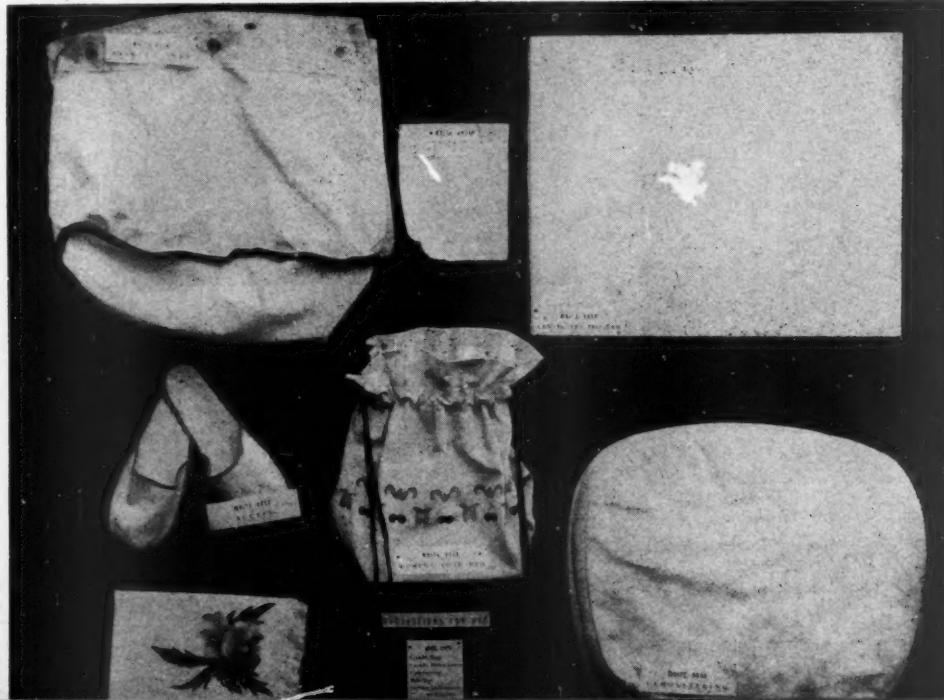
The cost of acquiring most items runs about 5% of the government's acquisition cost. This charge is intended to cover only the expense of the state agency in processing the paperwork required to get the property, moving it into the warehouse, storing it, and moving it out. The federal government does not get a penny of that money. The money is intended to make the state operation self-sustaining.

Your school district does not have to explain in detail its use of the equipment, except for specialized items such as aircraft, boats, etc. It is sufficient to say that you can and will use it in your educational program. You must certify, however, that property with a government acquisition cost of \$2,500 and over will be used within 12 months. This is intended to avoid a situation where a school might attempt to take a 10-year supply of a given item. The institution must also certify that the property is acquired for its own use, to fill an existing need and it is not acquired for any other use.

Once you have used the equip-

CAN YOU USE A MILLION YARDS OF DUCK?

Millions of yards of white cotton duck are available through the surplus program. Woolen fabrics are also obtainable. Home economics classes have used the materials to make such items as basket liners, tote bags, scuff, place mats, art canvas and furniture covers, shown below.



THINGS YOU CAN MAKE

Awnings

stage scenery

window shades

banners

class awards

band uniforms

aprons

lab cover-alls

canopies

Directory of state agencies through which you can obtain surplus property

ALABAMA

Mr. A. C. Walker, Manager
State Agency for Surplus Prop.
P.O. Drawer 30, Attalla

ALASKA

Mr. John Wiese, Supervisor
Surplus Property Service
P.O. Box 2057, Anchorage

ARIZONA

Mr. Howard N. TeSelle, Agent
Surplus Property Agency
5415 E. Washington St., Phoenix

ARKANSAS

Mr. D. W. Latch, Supervisor
State Agency, Surplus Property
Room 04, State Education Bldg.
Little Rock

CALIFORNIA

Mr. William A. Farrell
Chief Surplus Property Officer
State Ed. Agency, Surplus Prop.
721 Capitol Ave., Sacramento 14

COLORADO

Mr. John L. Myers, Dep. Director
Surplus Property Agency
Room 206, 847 E. Colfax Ave.,
Denver 18

CONNECTICUT

Mr. Arthur Pominville, Director
State Agency for Federal Surplus
70 Arch St., Hartford 15

DELAWARE

Mr. Alexis Tarumianz, Director
State Agency, Surplus Property
State Hospital, Farnhurst

DISTRICT OF COLUMBIA

Mr. Leslie P. Parmele, Chief
Ed. Surplus Property Div.
Room 419, District Bldg.
14th and E Sts., N. W.

FLORIDA

Mr. James Hunter, Manager
Surplus Property Dept.
Development Commission
Carlton Bldg., Tallahassee

GEORGIA

Mr. A. W. Blackburn, Director
State Ed. Agency, Surplus Prop.
State Dept. of Ed.
200 Walker St., S. W., Atlanta

HAWAII

Mr. Valentine U. Marciel, Dir.
Surplus Property Div.
Bureau of the Budget
759 Kelikoi St., Honolulu 13

IDAHO

Adm. William C. Specht, USN
Director, Surplus Prop. Agency
P.O. Box 1775, Gowen Field
Boise

ILLINOIS

Mr. Merle G. Moore, Supervisor
State Dept. of Finance
Div. of Administrative Services
P.O. Box 1236, Springfield

INDIANA

Mr. Raymond F. Ridge, Prog. Ex.
Federal Surplus Warehouse
Building 12117, Camp Atterbury
Edinburg

IOWA

Mr. Lloyd H. Seaver, Supervisor
Surplus Property Div.
State Dept. of Public Instruction
State Office Bldg., Des Moines 19

KANSAS

Mr. Robert H. Arnold
Surplus Property Officer
State Agency, Surplus Property
Rural Route No. 4 Box 36A
Topeka

KENTUCKY

Mr. J. B. Williams, Director
Div. of Property Utilization
State Dept. of Ed.
State Office Building, Frankfort

LOUISIANA

Mr. Carlton F. Jones, Exec. Off.
State Agency, Surplus Property
P.O. Box 4064, Capitol Station
Baton Rouge 4

MAINE

Mr. Calvin Conant, Jr., Director
Federal Surplus Programs
State Dept. of Ed., Augusta

MARYLAND

Mr. Frank K. Hazzard, Director
State Agency, Surplus Property
University of Maryland
P.O. Box 206, College Park

MASSACHUSETTS

Mr. Robert F. Nolan, Supervisor
State Agency, Surplus Property
200 Newbury St., Boston 16

MICHIGAN

Mr. J. William Hawes, Supervisor
Federal Surplus Property Section
300 East Michigan Ave., Lansing

MINNESOTA

Mr. C. E. Funk, Supervisor
Surplus Property Section
Dept. of Administration
Room 19, State Capitol, St. Paul

MISSISSIPPI

Mr. Jewell G. Smith, Director
Surplus Prop. Procurement Comm.
P.O. Box 10325 Westland Station
Jackson Air Base, Jackson 9

MISSOURI

Mr. Cecil Jenkins
Director of Special Services
State Dept. of Ed.
P.O. Box 480, Jefferson City

MONTANA

Mr. William J. Ernst, Director
Donable Property Div.
State Dept. of Public Instruction
State Capitol Bldg., Helena

NEBRASKA

Mr. D. E. Gardner, Supervisor
State Agency, Surplus Property
Dept. of Public Instruction
State House, Lincoln 9

NEVADA

Mr. Francis E. Brooks, Director
Div. of Surplus Property
State Printing Office Bldg.,
Carson City

NEW HAMPSHIRE

Mr. Henry L. Stevens, Director
Distributing Agency
31 South Main St., Concord

NEW JERSEY

Mr. George S. Allen, Director
State Agency, Surplus Property
172 West State St., Trenton 8

NEW MEXICO

Mr. J. F. Anderson, Director
State Agency, Surplus Property
P.O. Box 668, Santa Fe

NEW YORK

Mr. L. R. Murtaugh, Chief
State Agency, Surplus Property
State Education Bldg., Albany 1

NORTH CAROLINA

Mr. R. W. House, Chief
State Agy., Fed. Surp. Prop.
316 E. Lenoir St.,
Box 9553, Raleigh

NORTH DAKOTA

Mr. L. C. Peterson, Director
State Agency, Surplus Property
Dept. of Public Instruction
Capitol Bldg., Bismarck

OHIO

Mr. Walter G. Rhoten, Chief
State Agency, Property Util.
State Dept. of Ed.
Room 230, 40 South 3rd St.,
Columbus 16

OKLAHOMA

Mr. Gibson Lipscomb, Director
State Agency, Surplus Property
P.O. Box 3312, Capitol Station
Oklahoma City 5

OREGON

Mr. Wakefield B. Walker, Mgr.
Property Utilization Section
Dept. of Finance and Adm.
1361 Madison St., N. E., Salem

PENNSYLVANIA

Mr. William R. Bush
Div. of Fed. Surplus Prop. Dis.
2122 Forster St., Harrisburg

PUERTO RICO

Mr. Martin Marques, Jr., Director
Purchase and Supply Service
Dept. of Treasury
Commonwealth of Puerto Rico

P.O. Box 4112, San Juan 21

RHODE ISLAND

Mr. James P. Madden,
Surplus Property Section
Room 19, State House,
Providence 3

SOUTH CAROLINA

Mr. E. H. Talbert, Director
Surplus Property Procurement
1001 Main St., Columbia

SOUTH DAKOTA

Mr. Richard Larson, Director
State Surplus Property Agency
323 East Capitol Ave., Pierre

TENNESSEE

Mr. Harvey T. Marshall, Director
State Ed. Agency for Sur. Prop.
6500 Centennial Blvd., Nashville

TEXAS

Mr. L. K. Barry, Exec. Dir.
Surplus Property Agency
P.O. Box 4308, Station "A",
San Antonio

UTAH

Attn: Mr. Clifford Rampton,
Surplus Property Officer
45 Fort Douglas Boulevard
Salt Lake City 13

VERMONT

Mr. Rupert J. Spencer, Director
Central Property Agency
State Office Bldg. Montpelier

VIRGINIA

Mr. Z. H. Taylor, Exec. Officer
State Ed. Agency, Sur. Prop.
14th and Grace Sts., Richmond

VIRGIN ISLANDS

Mr. Marie Lewis, Head
Div. of Procurement
Dept. of Prop. and Proc.
Government of the Virgin Is.
Charlotte Amalie, St. Thomas

WASHINGTON

Mr. Kenneth Griffin, Manager
Surplus Property Section
4140 East Marginal Way, Seattle

WEST VIRGINIA

Mr. Okey M. Cagur, Exec. Dir.
State Agency, Surplus Property
Room B-57, State Capitol Bldg.
Charleston 5

WISCONSIN

Mr. Palmer O. Johnson, Sup.
State Agency, Surplus Property
Dept. of Public Instruction
Room 48, State Capitol Bldg.
Madison 2

WYOMING

Mr. Josef F. Reagle, Director
State Agency, Surplus Property
State Dept. of Ed.
Capitol Bldg., Cheyenne

ment and find you no longer need it, you are required to report it back to your state agency so it can be offered to another potential user. Failing to find any other use within the state, normally the agency will authorize the school to sell it. In such a case, the school will keep its acquisition cost and return any profit to the state agency which in turn puts the money into the U. S.

Treasury. After four years, you can do with the material what you please.

If the item has a value of over \$2,500, it must be reported to the federal government's regional office in your area, but even on these items, after a specific period of time, this requirement is eliminated.

How do local businessmen and manufacturers feel about this distribution? Interestingly enough, they

favor it. When schools and hospitals, or civil defense agencies, remove surplus equipment from the market, they inhibit the possibility that a middle man will buy it and flood the general market with the merchandise at a cut rate. The general attitude of business and industry is that much of the material absorbed by the schools would not otherwise be purchased. **End**

How to help your inexperienced

Here's a new way—well within the reach of any school district—to raise the quality of instruction in the classroom.

■ ■ ■ If you hired 15 new teachers in your district this year, chances are at least 10 never had seen the inside of a classroom before, except as students or student-teachers. Because of this problem, many schools have devised elaborate in-service training programs to speed up the "break-in" time of new teachers. In smaller districts, however, particularly when they are under-staffed, these programs can't get off the ground very quickly—and even when they are introduced, they frequently fail to accomplish their primary purpose.

But there is a new way—that can be used in any-sized school system—to give these teachers the help they need. It's called the *instructional materials center*.

What it is

The title sounds formidable and—like so many terms in education—doesn't describe its function.

The sole purpose of the instructional materials center is to improve instruction. It does this in three ways:

1. by providing a teacher-oriented storehouse of instructional aids;
2. by encouraging the effective use of these aids in the classroom;
3. by guaranteeing the sharing of ideas and resources within the system.

Basically, it is a combination of the school library and the audio-visual center, though its range of materials is broader than this implies. In it are stored and cataloged every kind of instructional aid—books and pamphlets, slides and films, models, student projects and special study units.

In operation, the instructional

materials center resembles an "idea bank." Teachers draw from it the tools and resources they need to enrich their teaching programs. They deposit in it their own successful lesson plan ideas, study units or classroom projects so that other teachers can use them. In this way the center promotes the widest use of a school's strongest asset—the work of its most effective teachers.

How an IM center works

In recent years, a torrent of instructional aids—many of them extremely useful—has been directed at our schools. Teachers welcome any and all such materials. They know they can improve their teaching through the effective use of the best materials and tools available to them. But these new learning resources must be accessible.

Experienced teachers—aware of the demands the classroom makes on their time—cannot afford to spend valuable hours searching for these new materials.

And new teachers seldom know where to begin to look for them. The instructional materials center steps in here to provide a much-needed coordinating service in the school.

It offers, in one place, all the available teaching aids that until now have been located throughout the school—in the library, principal's office, teachers' desks, laboratories or storage rooms. This helps solve two problems that plague all school districts:

1. It makes available a great variety of teaching resources that once had to be sought out and collected from many separate places within the school and outside it.
2. It helps relieve the strain im-

posed upon schools by the present nation-wide teacher shortage. (The U.S. Office of Education estimates the need for elementary and secondary teachers in public and non-public schools at 195,000 during the 1959-60 school year.)

The effects of the teacher shortage are cushioned somewhat by the assistance and guidance the instructional materials center provides. New teachers are directed to source material, helped to use it most effectively and in general are given substantial, useful support during a totally new—and often quite bewildering—moment in their lives.

The center also offers solid, helpful assistance to the increasing number of ex-teachers who have returned to their jobs. These people are, for the most part, mothers who left the school system to raise families. Now, after five, 10 and even 15 years away from teaching, they discover great areas in which their knowledge is deficient. The IM center provides information about curriculum, current teaching practices and with sample lesson plans they can use effectively in the classroom.

The center also helps ease the problems of another by-product of the teacher shortage—larger classes. The handling of greater numbers of students leaves the teacher with even less time to devote to the preparation of supplementary materials. The center does away with the need for the teacher to prepare them at all. They are filed, ready and waiting for use when the need arises.

Students benefit, too

But teachers are not the only ones to benefit from the services of the IM center. With its wealth of re-

teachers do a better job

sources, it is the logical place to satisfy the needs of inquiring students eager to develop personal projects of their own. This "one-stop" center provides them, too, with the kind of information they need to conduct studies on their own. For example, if a student sought help for a project on the American Indian, the center might provide him with these aids:

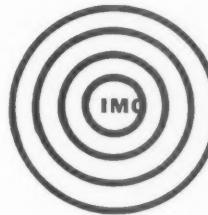
1. Published information—books, pamphlets, magazines
2. Artifacts—Indian arrowheads, weapons, cooking pots, headgear
3. Slides and photos—of Indian camps, buffalo, canoes, local landmarks identified as former settlements
4. Field trip suggestions—for visiting neighboring areas associated with Indian activities, museums or local collections
5. Personal interview suggestions—with local residents who are experts or who may be able to give eye-witness accounts of Indian experiences.

What an IM center looks like

In appearance, the instructional materials center resembles the school library, with some important differences. In addition to the usual reading area equipped with shelving, tables, chairs and card cabinets, the center contains a number of additional activity rooms not usually found in the conventional library. Among these—in a 500-pupil elementary or high school—would be:

- Conference rooms where group discussions can be held privately without disturbing other users of the center. The conference rooms, designed for small-group work, should each cover a minimum of 140

WHAT THE INSTRUCTIONAL MATERIALS



CENTER CAN GIVE YOU

A PLACE

For reading, listening to, and viewing materials.

For organizing, housing and distributing materials.

For preparing original materials devised in classrooms.

For maintaining and repairing materials and equipment.

For teachers to examine and preview teaching unit materials.

A SPECIALIST

To guide teachers in the use of supplementary teaching materials.

To inform students about practical research projects; what to pursue and how to pursue it.

To assist administrators and curriculum people in the study of their specific problems.

A STOREHOUSE

Of materials—models, charts, books, pamphlets, movies, slides, photographs, movies, display materials, exhibits.

Of ideas—field trip suggestions, community resource files, dramatization suggestions, working scripts, sample teaching units.

The IM center resembles an "idea bank" for the deposit and withdrawal of

square feet. At least one room (preferably 160 to 180 square feet) should form a long, narrow rectangle and contain sound and light control facilities for film previewing.

■ The work-storage room, which is used for receiving and unpacking equipment and materials, preparing them for circulation, mending books,

preparing teaching materials, storing magazines and supplies and professional aids. This should be an area of at least 300 square feet. Necessary equipment includes a work counter, sink with hot running water where possible, shelving, electric outlets, desk and chair, typewriter with table and chair, legal-size metal filing cabinet, some straight chairs or stools for librarian's student assist-

ants, a wardrobe and storage cabinet and a card catalog cabinet for housing the shelf list.

■ A storage room for audio-visual equipment and supplies. In it are kept films, filmstrips, slides, disk and tape recordings, globes, maps and display materials of all kinds for use in the classrooms. Equipment—movie and slide projectors, record players, tape recorders, screens—is also stored here together with repair and maintenance supplies. (Ideally, this area should cover about 200 square feet, though in some smaller schools it is done away with entirely and all audio-visual materials are stored in the center's larger work-storage room.)

The audio-visual storage room should include a standing height work counter, storage cabinets and shelves, storage areas for roller tables which carry projectors, space for roll-up maps, electric outlets and—if previewing and listening are planned for the room—darkening devices and acoustical treatment.

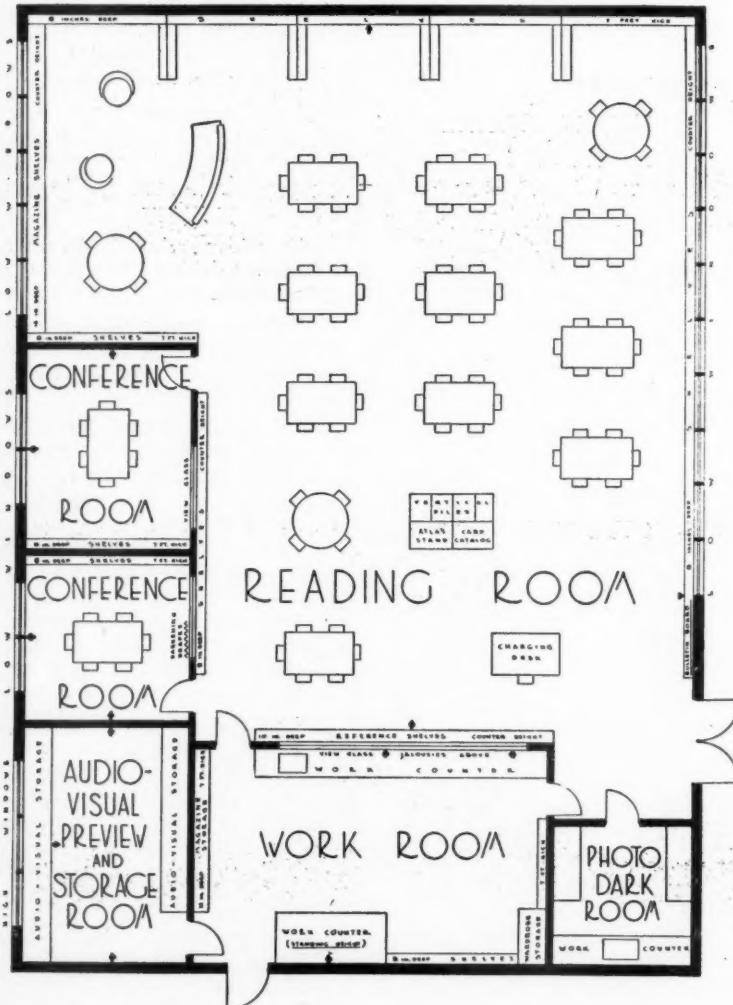
These three special activity rooms—together with the reading area—make up the layout of the typical instructional materials center. When possible, a photographic darkroom should be part of the center, too. Students can then learn about the technical side of photography. More important, the darkroom can be used for producing graphic materials to supplement teaching programs in the classrooms.

Who runs it

The instructional materials center is a storehouse of ideas for both students and teachers. But its heart does not lie in its materials collection, in its cross-indexed catalog files or in the equipment it can supply. The success or failure of the center depends directly upon the knowledge and ability of the trained specialist who runs it.

This person should be a master teacher—one who has library and audio-visual experience and a real understanding of administrative problems as well. These are all nec-

SAMPLE PLAN



In addition to a conventional library reading room, the IM center contains one or more conference rooms, an audio-visual preview and storage room and a separate work area. Where possible, the inclusion of a photographic darkroom is recommended.

teaching tools and resources.

essary qualities since he must serve in a variety of areas. He guides and informs teachers and students about instructional and enrichment materials. He suggests particular resource tools a teacher might find valuable. He makes concrete suggestions about the development of lesson plans. He even, when asked to, conducts lessons himself. In addition, he is able to instruct classes of students in the use and content of the library as well as the audio-visual center. And he is informed about curriculum since he is often called upon to assist curriculum study groups with professional materials and suggestions as to the direction such studies should take.

But shouldn't a master teacher, as well qualified as the one described here, be allowed to remain in the classroom where he is vitally needed? It might almost seem that using him to direct an instructional materials center only adds to the burden imposed by the teacher shortage.

In actual practice it does the opposite. One of the methods used by schools to cope with the lack of teachers is to select the more able among them and spread them over a greater area. The large-group high school instruction programs, conducted successfully at Newton, Mass., for the past two years, are an example of this. (See *SM*, July '58, for a full report on the *Newton Plan*.) More to the point are the great number of educational TV programs now being used in schools all over the country. (See "Put your school program on commercial TV," *SM*, Nov. '59, for a recent example.) By these means, far greater numbers of students benefit from contact with really superior teachers.

In the same way, the instructional materials specialist uses his outstanding abilities for the benefit of the entire school. Teachers, administrators, students—and the educational program—all gain.

How to organize an IM center

Assuming you want to set up an instructional materials program in your school district, where do you

begin? Does a center serve only a single school or the entire system? How do you find the right person to run it? How much will it all cost? These are all questions that must be answered before you make your first move.

To help answer these basic questions, *SCHOOL MANAGEMENT* editors traveled to Detroit, Mich., to interview four authorities on the subject. Each is vitally involved in the instructional materials program in the Detroit area. Our panel of experts included Dr. William C. Miller, instructional materials consultant, Wayne County Board of Education; Mrs. Gail Eshelman, librarian, John D. Pierce Junior High School, South Redford School District, Detroit, Mich.; Henry Corbacho, director of instructional materials, Birmingham, Mich. and J. Luster Godbey, curriculum coordinator, Wayne, Mich. In the following exclusive interview they discuss the value of instructional materials centers, how they can be established in a school district and what they can contribute to the improvement of learning.

Q. Let's assume that I am the superintendent of a small district. I'm lucky—I have a number of really superior teachers in my schools. These people have always gone out of their way to create teaching aids in the classroom and have done very well on their own. Do they really need an IM center?

CORBACHO: That depends upon what you mean by a superior teacher. We all know good teachers who excel at imparting informational knowledge—which can be interpreted through tests and evaluation. We can generally improve on whatever we are doing. A materials center is geared to help teachers produce, use and find instructional resources. Its service can and should include facilities, devices and supplies that otherwise would not be available, as a general rule, to an individual teacher.

Furthermore, an instructional materials center serves as a coordinating and sharing agency for materials

SM'S PANEL OF EXPERTS



Dr. William C. Miller
IM Consultant, Wayne County Bd. of Ed.



Mrs. Gail Eshelman
Librarian, John D. Pierce J.H.S.



Henry Corbacho
IM Director, Birmingham, Mich.



J. Luster Godbey
Curriculum Coordinator, Wayne, Mich.

produced by students and teachers. Thus outstanding units developed in any classroom can be used by others in the school. The work of superior teachers can be pooled to benefit a larger number of students.

Q. In other words the IM center really is a crutch for weak teachers?

GODBEY: It's hardly just that since it also offers good teachers teaching aids they might never have considered using otherwise.

ESHELMAN: Let's say it can act as a stimulus. Something rubs off on the less able teacher when a materials center is part of the educational program. Our experience shows that such teachers are inspired to go further than they would if they were working strictly alone. Having additional teaching materials at hand and working with others—the materials specialist, other teachers, students—is a tremendous incentive.

CORBACHO: I don't think the center should be called a crutch. It is a resource. The center is used as a one-stop agency by teachers looking for instructional materials. They can be advised that these supplementary materials are for their use in class . . . and that there are people who will help demonstrate how to use them.

But there is another important point that should be mentioned.

Teachers are very busy people and we, as administrators, ought to be freeing them to spend every minute they can with their children. The organization and classification of resources found in most instructional materials centers is an attempt to save the teacher time in the search for and selection of materials and devices that can be used for specific teaching purposes. This is done in the main by instructional materials personnel. The teacher fills her needs more quickly and finds that she has much more time to work with her children. This is a very important function of any materials center.

Closely related to this is the service of procuring materials from other libraries or sources. This is usually a clerical task. In the conventional situation the teacher may have to go through channels for permission to order a motion picture or send for a kit of materials. She will have to keep track of numerous details. She may incur out-of-pocket expenses, as many good ones do. These are all responsibilities that a materials center can assume for a teacher as a normal service. The teacher is freed to concentrate on more important tasks.

Q. Isn't this what school libraries have been doing all along? Distributing—besides books—pictures,

charts and other graphic materials.

CORBACHO: Yes they have, but the average school library has been limited pretty much to *student* participation. The IM center increases that participation and also makes it possible for teachers and students to work together on units of instruction.

MILLER: Yes, but the center is far more flexible than the library. For example, we found in a small suburban school district that no printed material was available for a seventh grade study unit devoted to Michigan. So we worked with the students and helped them obtain pertinent information from local people. This material took the form of interviews, photos and slides of local landmarks and points of interest and collections of written materials. Important here is the fact that the kids weren't simply being fed information by a librarian. They were working to create a study unit together, and that's something far different.

GODBEY: And this isn't the kind of activity you would normally see going on in the hush-hush, conventional library. If study materials are to be created, you must have activity areas and facilities that do not exist in the traditional library set-up.

ESHELMAN: Let's not overlook the professional materials that are part of every center—the literature that is now sometimes found in the principal's office, but rarely in the library. The center is the logical storage place for new instructional and curricular materials—sample text books, kits of study aids, resources for curriculum study groups—that can be procured on request.

But beyond these collections of things, the center has value because it sparks ideas—ideas for study approaches, field trips, class participation, research sources. The pivotal factor here is that the specialist works directly with teachers, not solely with materials. He helps them plan—and do—better teaching jobs; in that sense it's a form of continuing in-service teacher education.

Q. Suppose a school board decides that an IM center would be a good thing. It tells the administration to go ahead. Where do they begin?

MILLER: You can start modestly



Pupils and teachers charge out books, models, other materials for home or classroom use from IM center at Lee M. Thurston High School, Detroit, Mich.

right in your own schools with the materials already at hand. You can make a helpful start with a voluntary pooling by teachers of the materials they have been using in class and are willing to share. Many effective instructional materials centers I know of started small. Once they proved their value, their needs in terms of additional funds and trained personnel were recognized and filled.

CORBACHO: I think there is virtue in starting wherever you have willing personnel, whether it's in a classroom, an individual building or the central service unit. But it can be a waste of taxpayers' money to do this without planning at the same time for a total program for the entire school system. Initially, this plan could be prepared by a committee of teachers with an administrator in charge. Thereafter a capable staff should be employed to carry on the program and extend these services to every teacher and school in the system.

Q. Isn't it essential to begin the program with specialists specifically trained to handle the centers?

CORBACHO: One of the things that deters so many people, especially in elementary schools, from getting instructional materials at all, is the mistaken idea that you absolutely must have a trained specialist supervising the program. Sure, you'll need trained people, but a good start can be made without a specialist, if en-

thusiasm for the idea is present and competent leadership is provided. The professional preparation of the person chosen to handle the program is not as important as his professional attitude toward developing it.

Of course, if you can find a staff member with adequate training and experience in library and audio-visual work, so much the better. You'll be able to move ahead much faster and more efficiently than you could otherwise.

MILLER: This is something like using a bicycle when you haven't a car—it will get you there, but it will take longer. It seems to me that the school librarian may be the logical choice for heading up the materials center until a more broadly oriented specialist can be obtained. She's in the center of things at school, knows what is going on in the classrooms, knows what is available in terms of materials and is constantly in touch with the school's students, teachers, administrators.

Q. What's the librarian going to say about that? Isn't there a possible conflict between libraries and instructional materials centers? Do they mix?

GODEBEY: They mix, but they operate on different levels. It's simply that the scope of the materials center goes beyond that of the conventional library—beyond book materials alone. The title of the person in charge is unimportant—librarian,

resource specialist, learning materials coordinator. His function is something else again—to help teachers by providing a broad range of materials, information and services.

CORBACHO: I certainly would not plan to have a library down in one end of the building and an IM center up at the other end. The two should be integrated and perhaps the librarian is the one to supervise the functions of both. It looks like we are going to need many more specialists with this unique preparation in the very near future.

MILLER: There seems to exist a very real danger of establishing separate but equal facilities for the libraries and materials centers in some schools. This is not "one-stop" service and it will weaken the operation of the entire program. Certain materials—over-sized charts for instance—will belong neither in the library nor, since they're not pictorial, in the visual aids section of the center. How, then, is the teacher in need of such material to know where to find it quickly and easily? The whole activity demands the integration of library and audio-visual services.

Q. Should a materials center be established in every school with a library? Or can one major center serve an entire school district?

CORBACHO: Ideally, there should be a materials center in each school with smaller counterparts in every classroom. But there's no reason why you can't start with a system-

WHAT QUESTIONS DOES AN IM SPECIALIST ANSWER?

History teacher: What films or filmstrips can we use to start building a unit on the Civil War?

Fifth grade student: What is the size of the Mackinac Bridge? What materials can I use to make a model of it?

Third grade teacher: We are studying the Indians who originally lived in this region. Is there an authority in the community who would come and talk to my children about them?

Principal: Do you have any materials I can use at a teachers' meeting to explain the National Defense Education Act?

Science teacher: What materials can I use to answer the question, "Can two different people have identical finger prints?"

Director of curriculum: Would you set up an exhibit to show new teachers the instructional resources we have available?

Social studies teacher: Can you help me take a picture of our exhibit on the United Nations?

Kindergarten teacher: How do I use this flannel board story of the Three Billy Goats Gruff?

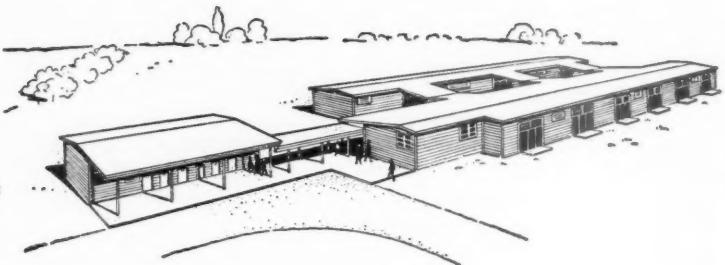
PTA chairman: How is TV being used in schools? Should we get a set for our school?

Counselor: Can you transcribe some student interviews I have on tape?

Special education teacher: Do you have any materials I can use to explain how Braille is written?

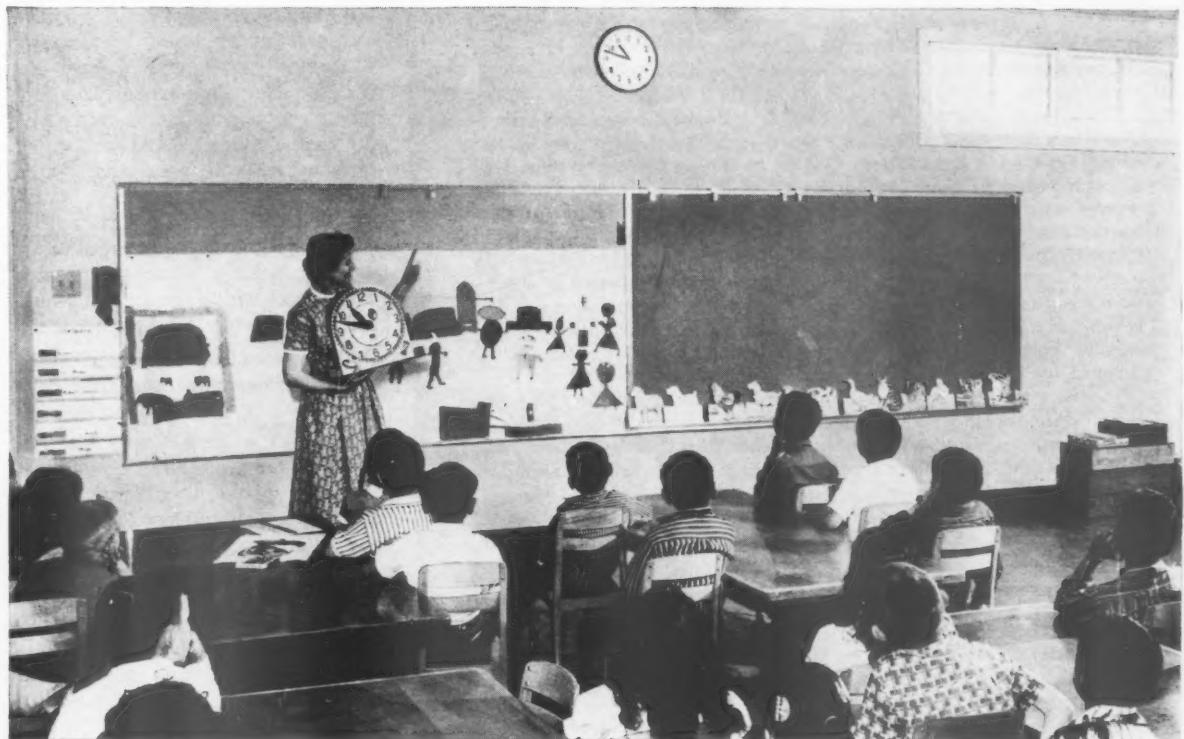
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TWO DIFFERENT CENTERS IN OPERATION

On the elementary level

Phyllis Greer, elementary librarian, supervises a materials program in six elementary buildings in the Van Buren Public Schools, Belleville, Mich. Each school has its own library which Miss Greer visits once a week, at which time she is available to teachers there for consultation. At the same time, she visits classrooms on request to observe and make suggestions about the use of supplementary instructional materials available from her central office.

These materials—everything other than library books and magazines—are cataloged, processed, housed and circulated from this central office. Cataloging is done according to the Dewey Decimal system. Thus a book about colonial Williamsburg would have the same catalog number as a film or filmstrip on the same subject. Records, though filed by subject, are stored numerically. Vertical file materials—pamphlets, clippings, pictures, maps—are also filed alphabetically by subject.

Teachers requisition materials—which are delivered twice a week—from the center. Special orders are rushed through at any time. The requisition form is kept simple, consisting of a check space for the type of material wanted, the name and number of that material and a space for the teacher's name and school.

Teachers are kept informed about available materials through:

1. Personal contact with Miss Greer.
2. A reference volume, "Timely Teacher Aids," revised each year. It contains complete subject and grade listings of all available materials together with brief descriptions.
3. A periodic newsletter listing recent additions to the materials collection as well as suggested uses of materials for special occasions, holidays, etc.

On the secondary level

The materials program at Lee M. Thurston High School, South Redford School District, Detroit, Mich., is directed by the school librarian, Mrs. Alma H. Schlotterbeck. The variety of materials—in addition to books and magazines—available to teachers are cataloged, housed and distributed from the library proper.

Students are encouraged to learn library skills and themselves select materials to be borrowed for use in classroom lessons. Blue cards describing films, filmstrips and recordings and salmon-colored cards listing all other materials, are filed in the general card catalog. Again, the Dewey Decimal system is used, but with this added feature: classification numbers are preceded by code keys describing the kind of material listed—FS for filmstrips, M for maps, CH for charts, P for pictures, REC for records.

Information about new materials is sent to each teacher periodically through the school's internal mail system. In addition, the librarian works closely with individual teachers to help solve classroom learning and reading problems. Frequent checks are made on students' library cards to determine how much they use the library's resources.

The library at Lee M. Thurston High School includes a professional shelf for teachers, consisting of books on curriculum planning and teaching aids as well as collections of resource units. The librarian works closely with the entire teaching staff, participates in department meetings and is an active member of text book selection committees.

Service is the keynote here—service to teachers, students and administrators—with the library providing suggestions, information and materials from a single, central, convenient source.

wide program, expand it to include building centers and eventually decentralize it to benefit each classroom. This growth seldom occurs uniformly. This classroom set-up is really a matter of economy. It isn't very efficient to hire a \$2-an-hour truck driver to cart a \$1 felt set or record from building to building.

MILLER: Theoretically, we want all our materials as close to the ultimate consumer—pupil and teacher—as possible. But some expensive equipment, which couldn't be purchased for each building, could be located in some central area and shared among several schools. A photographic darkroom, for example—which might prove too expensive for each elementary school—if located somewhere within the system would prove invaluable to all the teachers.

Q. How should a materials center differ in elementary and secondary schools?

GODEBEY: The general organization might be the same but the materials available would be different. This difference would depend upon the youngsters served—on their ages, their maturity levels, their experience needs. Kids of 13 or 14 require more difficult material, obviously, than those in the first few grades. An elementary center's model of the human eye, for example, wouldn't be nearly as complicated as the one on hand for the use of high school biology students.

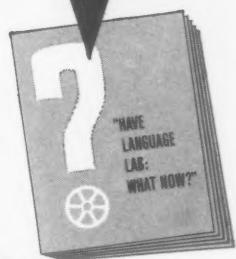
ESHELMAN: You might classify the difference this way. The high school center would have more material per student than the elementary. This is due to the wider range of differences in ability, flexibility and independence in investigation among students as they advance through the grades.

Q. How much will it cost to establish an IM program?

MILLER: It's almost impossible to quote an exact figure—so much depends upon what you already have available in terms of people, facilities and material. The average annual expenditure for instructional materials in 1954 was \$1.05 per pupil, but this figure is misleading. It probably supported an inadequate program in 1954, one not

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nearly as all-inclusive as the one we're considering for 1960. The latest American Library Association figures recommend something like \$3 for printed materials alone. And, of course, these figures don't include spending for audio-visual materials, new equipment, depreciation and replacement of old equipment or the money ear-marked for salaries.

GODEBY: Assuming that the space for a library or materials center in a new elementary school is roughly equal to that of one classroom, its cost—including equipment and shelving—would be about \$30,000. If we were to remodel and equip existing buildings, we have estimated our needs in Wayne at \$10,000 a year to renovate two schools a year for five years. We're budgeting, in addition, \$30,000 a year over the next five years for centers in new buildings. At the end of that period we hope to have materials centers in every school building—old and new—in our district.

Q. How about budgeting for an already established instructional materials program? What factors should be considered?

CORBACHO: A budget based on carefully determined needs would be the most reliable approach. A develop-

ing center is faced with many one-time purchases. This is obvious. These initial expenditures for capital outlay will seldom be repeated. To be sure, equipment, furniture, materials and books will be added to and replaced with the passing of time.

You may later want to expand the scope of the instructional materials program. This may include adding new services and new materials and increasing the staff. As the program matures and takes hold, its financing will become quite predictable.

Q. It seems that it highly skilled people will be needed eventually. What qualifications should one look for?

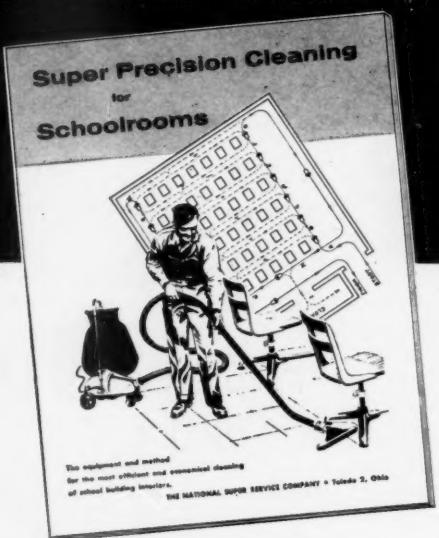
MILLER: First of all, your IM specialist should be a mature, outstanding classroom teacher with the ability and *desire* to be of service. This helpful attitude is all-important. He should be able to work effectively with administrators, teachers and students. He must have knowledge of the curriculum and of child growth and development. He should be acquainted with the community. And he must, of course, be well informed about instructional materials and know how to organize, house and use them.

Q. Should one assign a specialist to each building or could all of the



A system-wide curriculum planning group in Birmingham, Mich., refers to sample text books, guides and other materials that form IMC's professional library.

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buildings be administered centrally?

CORBACHO: Initially a director will be needed to administer the central unit and offer system-wide assistance. Of course, it would be wonderful to have a specialist in each school too, but that isn't vital, at the outset at least. Four or five consultants could do the job effectively if they were put on a regular classroom teacher schedule and traveled regularly from building to building to help with the program.

GODBEY: I'd like to add a point here about consultants. There is so much they could accomplish during the summer when the schools are closed that I think you'd be passing up an opportunity if you hired them on a 10-month school-year basis. For one thing they would have more time to devote exclusively to planning and organizing the program if they were freed—as in the summer—from the daily pressure of service responsibilities. It seems wasteful to me to go to the trouble of hiring specialists, only to cast them adrift for the two months of the year when they could do the most effective studying and planning for your materials program. It seems far more constructive to me to hire these people on an 11-month basis with a month's vacation in December, when the need for their presence is not as great.

Q. Does the IM coordinator work actively with teachers, too, or does he just supervise the work of the building specialists?

CORBACHO: Ideally the director in a medium size school district should be able to spend about half his time on administrative matters and the remainder working with teachers in numerous in-service and curriculum improvement activities. To do this he would need the support of a well-trained staff. Its number and composition would vary with the program offered and the size and needs of the school system.

If building specialists were employed they might fall under the supervision of building principals or the director of the instructional materials program. Each school system would have to make its own decision on this matter. Your coordinator should be a consultant to all the people in your schools but he should administer his own—and only his own—program.

End

They dunked doughnuts to win votes



When residents of Anaheim, Calif., were asked to approve \$28 million worth of bond issues and state loans last spring, the district turned to "kaffee klatsches" to help meet the voters and bring the school message home.

By PAUL W. COOK

Superintendent, Anaheim, Calif., Union School District

■ ■ ■ Dunking doughnuts and drinking coffee helped us to pass a huge bond and loan referendum. Any school district could do the same.

Last spring the two school districts of Anaheim—elementary and high school—with a combined enrollment of 23,000 students, asked the voters to approve a total of \$28 million in state loans and bonds.

No California school district of our size had ever asked for so much, but we needed every penny of it. Our high schools had to double their ca-

pacity in four years. This meant building and equipping two complete senior high schools, three junior highs and making additions to three other junior highs. Our elementary schools desperately needed a \$3 million expansion program and future needs dictated that we purchase sites for 10 additional schools.

We realized the magnitude of our job. We knew that traditional methods of campaigning—speeches, brochures and endorsements—would not serve to get people to vote to put themselves \$28 million into debt.

On the other hand, we felt that if we could reach every voter personally, could really tell them our story, that they would support us. The question was, how to do it.

Our first step was to appoint a citizens' advisory committee of 25 people from diverse occupations who, we knew, were interested in the welfare of our schools. These people unanimously agreed to support actively our campaign.

Step number two—the key one—was to bring our message directly to every voter. To do this, we decided

"We felt that if we could really meet the voters face-to-face and tell them our

10 keys to a successful bond campaign

The voters of Cincinnati have passed 13 school referendums in the last 21 years, rejecting only three. Here are 10 keys to Cincinnati's success, as presented by John F. Locke, director of community relations, who headed all of the referendum campaigns.

1. Present your referendums at the same time regular elections are held—except during presidential years.

Two good reasons for not holding special elections: the district must pay for them and, in many states, special referendums have to be passed by more than a simple majority. Avoid presidential years because more people who aren't parents—and who don't understand school needs—will come to the polls. One of Cincinnati's three defeats came during the 1940 presidential election.

2. Don't present an issue to the public until board members are in agreement as to how the money is going to be spent.

If board members are squabbling, or if alternatives are still being debated, the voters are not likely to be convinced of the need for the money.

3. Leave emotional appeals out of your campaign.

Voters should be told the facts, unemotionally. Threats to close the schools or fire teachers have no place in a school bond campaign. "They relegate the real need—the best possible education for children—to second place," says Locke.

4. Don't use school employees as campaign workers.

"This puts them in the position of asking the public for more money," Locke points out, "and people might interpret it as a self interest proposition."

5. Make full use of citizen committees (see story).

"The best people to sell school issues are your next door neighbors, the fellow down the street," Locke states. In Cincinnati's last campaign, Locke organized 6,000 workers to ring doorbells in every election district.

6. Conduct registration campaigns.

Even if you convince everyone to vote your way, they must be registered. Registration campaigns are particularly effective in smaller districts and concentration should be put on residents with children in school.

7. Furnish baby-sitting service on election day.

Many districts have found this an important aid in getting the voters to the polls. Cars to transport voters in bad weather are also effective.

8. Use volunteers to distribute campaign material.

Getting material into the hands of all the voters is important, but people paid to do the distributing seldom are as effective as dedicated volunteers. "I used paid workers to distribute leaflets only once, and I found a lot of them were thrown away," Locke says. "You save money and get a better job with volunteers."

9. Institute a regular program of public information.

No matter how well planned and executed your campaign is, nothing substitutes for a constantly well-informed electorate. A regular public information program will give your schools a base from which to launch the bond campaign.

10. Get your superintendent out from behind his desk.

"To be successful, today's administrator must get up from behind his desk and go out into the market place," Locke insists. "He must know the pulse of his community and must do something about it."

to make use of the "kaffee klatsch" or coffee hour. As we conceived it, a kaffee klatsch would be an informal gathering in a private home at which the guests would drink coffee, dunk doughnuts if they liked and hear why they should vote for the school bonds.

We organized and held more than 400 kaffee klatsches. Through them we reached almost 5,000 citizens. We found our listeners were very interested in what we had to say and asked pertinent questions to help in their own understanding of the situation.

Volunteers needed

The kaffee klatsch schedule was set up in cooperation with the PTAs. Letters were sent to the parents and patrons of the schools asking for volunteers to hold kaffee klatsches. Our teachers and classified employees also scheduled get-togethers among their groups.

A hostess holding a kaffee klatsch invited from 10 to 20 friends and neighbors to her home. She furnished coffee and we furnished speakers. The presentations—which utilized maps and brochures—were kept relatively short and to the point. At least half of the time was spent answering questions. It usually took about half an hour to make the presentations.

Whenever a speaker was asked a question he could not answer, he took the name and phone number of the questioner, and the superintendent or a principal was called upon to supply the answer.

Private crusades

We had kaffee klatsches ranging in size from as few as four participants up to 30. Many members of the community started private crusades to put over the bond election and often encouraged their friends and neighbors to hold gatherings.

The kaffee klatsch had another interesting effect which we had not at first realized. Neighborhood grapevines, nourished by our informal meetings, served to spread our story so that we had little or no confusion or disagreement on the essential points of the campaign by

story, they would support us."



Well-prepared speakers came to each kaffee klatsch to present talks and answer questions. The sessions helped pro-school forces meet voters face-to-face.

the time the election was held. Although we had some opposition, it was not organized and we found that as more people learned the needs of the two school districts, the opposition arguments steadily lost ground.

Other means to an end

Of course, we did a lot of other things which are usually done in bond elections. We talked to over 200 organizations of every type within the district. We made speeches as early as seven in the morning and as late as 11:00 at night. In addition, we distributed over 50,000 leaflets and carried on a drive for voter registration.

During the last two weeks of the campaign we distributed a series of question and answer articles to the six newspapers in this area, all of which lent whole-hearted support to our campaign.

The last three days of the campaign the newspapers carried dozens of written endorsements from prominent individuals and organizations in the community.

About two weeks before the election we obtained a list of all the registered voters. We took the list to each of the schools in the area and

gave a single sheet to a volunteer PTA member who took it home, looked up the telephone numbers, and, the day before the election, called everyone on her list to remind them of the importance of voting.

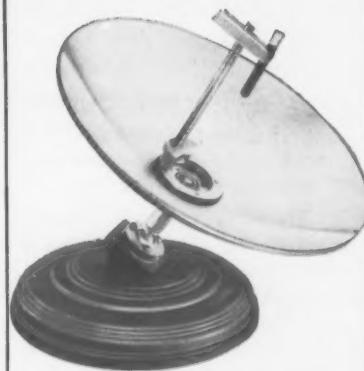
We timed most of our efforts, as far as radio, newspapers, and speeches were concerned, to bring the campaign to a climax the day of the election. We strove to make the bond campaign the chief topic of conversation and interest on Tuesday, March 24, 1959.

The big day

On that day, Anaheim had the largest school-vote turnout in its history. By a margin of six to one, the electorate authorized both the issuance of school bonds and acceptance of state loans.

We like to think that this tremendous support was due to the fact that we have always kept our citizens aware of school needs and have run a good economical program. But we know that this alone does not bring out the vote. Publicity in the newspapers, before clubs and over the radio helps. But it was our kaffee klatsches that really brought our message to the voters. **End**

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How to use punch cards to solve your ticketing problems

Assigning tickets for high school athletic events, accounting for the money you received and keeping all the old customers satisfied can be a frustrating job. Here's how one organization solved the problem with punch cards.

By LYLE T. QUINN
Executive secretary, Iowa High School Athletic Association

There is nothing quite so frustrating as being the ticket manager for a school athletic event. Most people get involved in the job because they like sports. So what happens? You do a huge job of selling tickets, everybody jams into the auditorium to see the teams play, and the ticket manager ends up spending the whole time in a little office trying to balance the books, settle little disputes over seats and generally regain some semblance of composure.

I know. For many years as executive secretary of the Iowa High School Athletic Association, that was my lot. Nobody got to see less of the athletic events than I.

The IHSAA runs a two-day, eight-team basketball tournament during March of every year. We hold it in the Veterans Memorial Auditorium in Des Moines, which holds 15,000 spectators—and every seat is usually filled.

Too many tickets

We found the volume of tickets handled during the tournament, which climaxes the Iowa high school basketball season, was swamping our manual ticket handling operation. To try to alleviate this jam-up, we turned to machine accounting methods, using order forms and tickets in punched card form.

We had been depending on news-

paper stories to let everyone know that tickets for the annual event were on sale. When order letters came in, we transferred the information manually onto order forms. This was slow, inefficient in terms of clerical labor and not particularly accurate. In addition, a certain percentage of long-time customers invariably did not see the announcements and did not get tickets.

Under our new punch card system, we now have two master decks of IBM cards at the association offices in Boone, Iowa. One is a master customer deck of about 3,000 cards listing the names and addresses of perennial customers. The other is a master seat deck, listing

TICKET ORDER FORMS ARE PRE-PRINTED, READY TO FILL IN

ADVANCE TICKET SALE: USE YOUR PRIORITY RIGHTS	
The Iowa High School Boys' 1959 State Basketball Tournament Semi-final and Final Rounds, Two Days Only, March 6 and 7, 1959 Veterans Memorial Auditorium, Des Moines, Iowa	
4 Sessions! 2 Games Each Session: 4 Class A and 4 Class B Teams Will Determine Two 1959 State Championships. Complete the Ticket Order Form On Other Side and Mail AT ONCE With Remittance Inside Envelope Provided For Your Convenience.	
SCHEDULE OF GAMES	
Day	Time
1	Friday, March 6—1:30 and 2:45 P.M.
2	Friday, March 6—7:30 and 8:45 P.M.
3	Saturday, March 7—1:30 and 2:45 P.M.
4	Saturday, March 7—7:00 and 8:15 P.M.
10s. Class B Game and One Class A Game Each Session	
—THIS SPACE BELOW FOR YOUR NAME AND ADDRESS—	
Henry Boone Supt. of Schools Woodbine, Iowa	
(Be Sure the Above Address is Correct)	

HENRY BOONE	
My Ticket Order for the SEMI-FINAL and FINAL Games, Boys' State Basketball Tournament	
<input type="checkbox"/> NOT WRITE IN THIS SPACE	
Act. of Order	14.00
Adm. Order	1.00
Postage	1.00
Overpayment	1.00
Total Received	15.00
SEND ORDER AND REMITTANCE TO: IOWA HIGH SCHOOL ATHLETIC ASSOCIATION BOONE, IOWA	
TICKETS AT \$1.00	
SEASON RESERVED SEAT TICKETS (4 sessions)	
SINGLE SEASON RESERVED SEAT TICKETS AT \$2.00	
SINGLE SEASON RESERVED SEAT TICKETS AT \$1.00	
TOTAL TICKETS AT \$2.00	
SINGLE SEASON RESERVED SEAT TICKETS AT \$1.50	
Today afternoon—night Saturday afternoon—night	
TOTAL TICKETS AT \$1.50	
SINGLE SEASON RESERVED SEAT TICKETS AT \$1.50	
Friday afternoon—Friday night Saturday night	
TOTAL TICKETS AT \$1.25	
SPECIAL STUDENT TICKETS for Saturday Afternoon ONLY	
TOTAL TICKETS AT 75¢	
Amount enclosed for mailing and insurance	
TOTAL REMITTANCE ENCLOSED \$16.75	
Check not location desired Floor: Low, Middle, High	

seat number, row, section, location and price for each seat in the auditorium where the tourney is held.

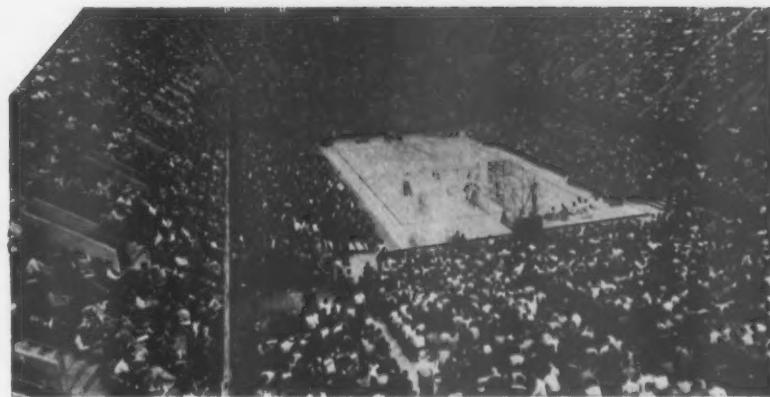
When the time comes to get the wheels in motion for the tournament, these two decks are sent to the Service Bureau Corporation at Des Moines. There, they are put through an IBM printing reproducer.

From the customer deck, pre-printed advance order cards (see illustration, page 60), listing ticket prices, ordering instructions, etc. are punched and printed with the customers' names and addresses. Cards to be used in mailing tickets are also addressed from this customer deck.

The master deck is used to produce a ticket (see illustration below) and a duplicate for every seat in the auditorium for each of the four sessions. The machine prints row, seat and section numbers across the end of each ticket in large figures which are easy for ushers to read.

Both the master and reproduced decks are returned to our offices. The order forms are mailed out to the potential customers in window envelopes.

When customer orders and remittances come in, they are matched with the proper address card and given to our card punch operator. If "season" tickets (for all four doubleheaders played during the tournament's two days) are ordered, seats are assigned on a priority basis, depending on how long the person ordering has been a patron. Working from a list, the operator punches the customer's priority code into the address card, automatically duplicates this information into the order card, then



Auditorium is packed by 15,000 fans, each with personalized ticket.

punches in the date the order arrived, the total amount (including postage) and the amount for the tickets alone.

The printing card punch then automatically duplicates all this information into a yellow accounting card. The three cards are separated on an IBM sorter and the accounting card and cash go to the bookkeeper.

Working from a master seating plan of the auditorium, the customer's seats are then assigned. All priority season ticket orders are filled first, then the rest are filled in the order in which they are received.

The seat number or numbers are written on the bottom of the order form. Working from it, the proper tickets and duplicates are pulled from the file. The address card is put in front of them, and they are put through the printing card punch which automatically punches in the customer's name and prints it across the top of both the ticket and the

duplicate. The tickets and address card are then mailed to the customer in a window envelope.

Double check

The duplicate ticket is matched with the original order form and filed by name of purchaser. Then, if a spectator comes to the ticket office just before a game and informs us that he has forgotten his ticket, we get his name and check the duplicate file. If a ticket was mailed to him, he pays the cost of the ticket again and we escort him to his proper seat. When he mails in his original ticket after the tourney, we refund his payment in full.

Duplicate tickets also serve an accounting function. Those for tickets sold are balanced to cash. These, plus duplicates of unsold tickets, balance to the total dollar value of the seats in the auditorium. An IBM accounting machine is used for all cash and balancing reporting.

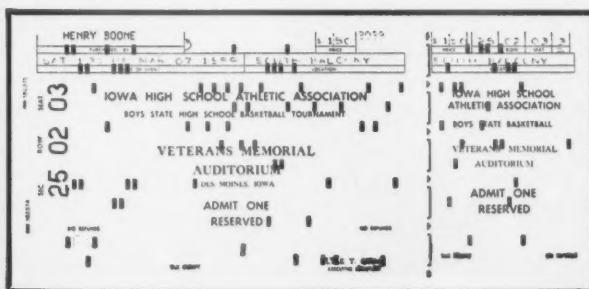
As valuable as the clerical benefits of our punched-card ticket system have been, the promotional and public relations gains have been even greater. All regular customers are now notified when tickets go on sale, and if they order tickets, they are personalized with their names.

This, of course, has a tremendous psychological value. So does the use of the IBM card itself. To most people a punched card is associated with a sound well-organized business operation. We believe that ours is just that.

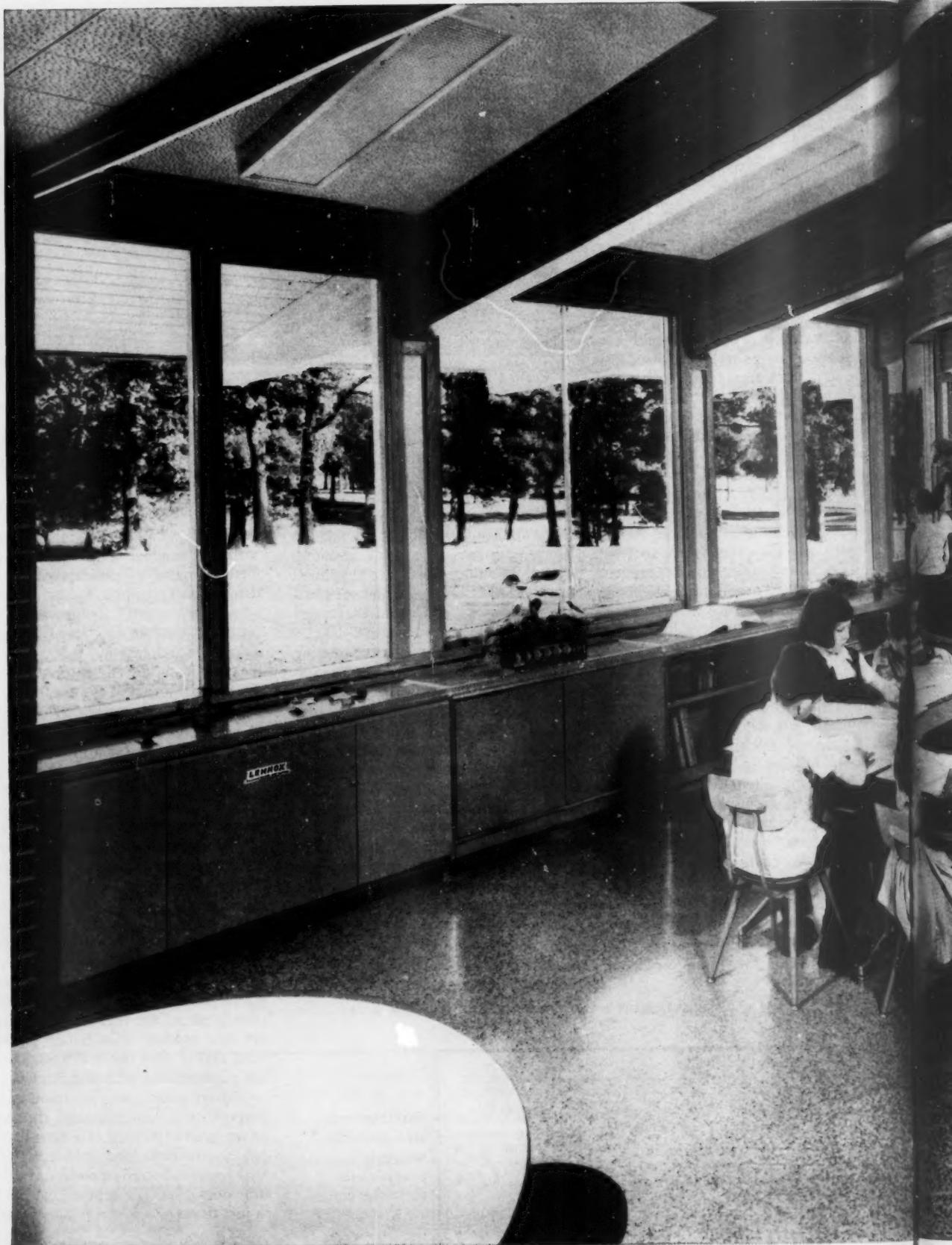
End

For more information on punch card tickets circle number 903 on the Reader Service Card.

CUSTOMER'S NAME IS ON TICKET



Fast, personalized, accurate service is possible with IBM ticket cards.





The Lennox Living Laboratory: This \$50,000 school has been built by Lennox Industries, Inc. in Des Moines, Iowa to carry on research in the field of school classroom heating, ventilating and air conditioning. Extensive research and testing is carried on continuously, both with and without students present in the classrooms.

GAS and
LENNOX can
provide your schools with the
finest in fresh air heating and
ventilating...

at lower operating and building costs

This new Gas system automatically draws in fresh air from outside . . . warms, cleans, and circulates air quietly and evenly throughout the school.

It's hard to believe, yet 65¢ per square foot was the complete cost of installing a Gas-fired Lennox Comfort Curtain System in the Potosi, Missouri, High School — including automatic controls, ductwork, labor — everything.

This is unusually low, even for the Comfort Curtain, but costs of \$1.03 in Indiana; \$1.15 in Montana; and \$1.12 in South Dakota were *usual and typical* of the amazing savings offered by a Lennox Comfort Curtain System using Gas.

Money saving, safe Gas units are being installed in thousands of schools across the country. If you have specific questions, your local Gas company or a Lennox specialist—or both—will be available to assist the architects and engineers to illustrate how this equipment can best be applied to any specific school plan. Check the facts about Gas and you'll see—modern Gas heating out-performs all other fuels.

Call your local Gas company or write to Lennox Industries, Inc., 1701 East Euclid Ave., Des Moines 5, Iowa. *American Gas Association.*

(Circle number 703 for more information)



TELEVISION can tell your school story

Here's how one district is using its local TV station to show voters exactly what is going on in the schools.



Small group conferences became a meaningful phrase after Springfield's parents saw how they work over television.

■ ■ ■ Television is a teaching tool. It is also a public relations medium.

In Springfield, Mo., the schools have taken advantage of television's public relations opportunities by putting some of their classes on the air, every week for the past seven years, so that parents and other interested citizens can see exactly what the schools are doing.

In addition, a weekly school news program is run and directed by students and all new teachers in the Springfield system are appearing on a television series this fall and winter (see *SM*, Nov. '59, pg. 29). Special "one-shot" shows on various aspects of the school program—such as music and mathematics—have also been scheduled. Time has been donated by two local TV stations.

Most of the telecasts—especially those from the classrooms—are undertaken with a minimum of preparation, fuss or interruption of the regular school program. On these pages are some scenes from a few of Springfield's television programs. In Springfield, television has proven an effective way to help the voters learn what the schools are trying to do. Here's a blueprint for action in any district within range of a commercial TV station.



Classroom situation was simulated so that parents could get view of standard teaching methods. Students were not rehearsed.

Enrichment program in science was demonstrated over television. Telecast also served to advertise upcoming science fair.

Increased enrollment in advanced math courses was goal of this program. Students show value of math to different vocations.



These **USS** AmBridge Modular Schools were started this spring ... completed this fall!

Good-looking, economical steel schools
go up fast... are strong and safe!

Building a new school needn't be a long, drawn-out project. An increasing number of school boards are getting new schools quickly by turning to USS AmBridge Modular Schools.

The two buildings shown here were begun just this spring—and completed for the fall term. Nobody was trying to set a speed record—AmBridge Modular Schools just lend themselves to simple, fast construction. These schools feature good, sound construction, lasting good looks and practical, flexible interior arrangement. Maintenance will never be a major problem either! And, of course, there's safety—both in the layout and the fire-resistant steel construction. USS AmBridge Modular Schools give you all of these advantages, *plus* economy.

USS AmBridge Modular Schools are built of standard steel components. They arrive at your site already assembled, ready for rapid construction in any season, cutting construction time and field work to a minimum.

AmBridge Modular Schools are as beautiful as they are sturdy. Exterior and interior panels are available in a wide choice of attractive colors. Porcelain and baked enamel finishes are available—or stainless steel if you prefer.

If you're faced with a classroom shortage, suggest that your architect contact us. You'll like the economy and lasting good looks of USS AmBridge Modular Schools... and the early occupancy date.

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Division of
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AmBridge Modular Schools, Room 1831, American Bridge Division
United States Steel Corporation, 525 William Penn Place, Pittsburgh 30, Pa.

Please send me a free copy of your 24-page booklet on USS AmBridge Modular Schools.

Name _____ Title _____

Address _____

If you are an architect, name of firm _____

City _____ Zone _____ State _____

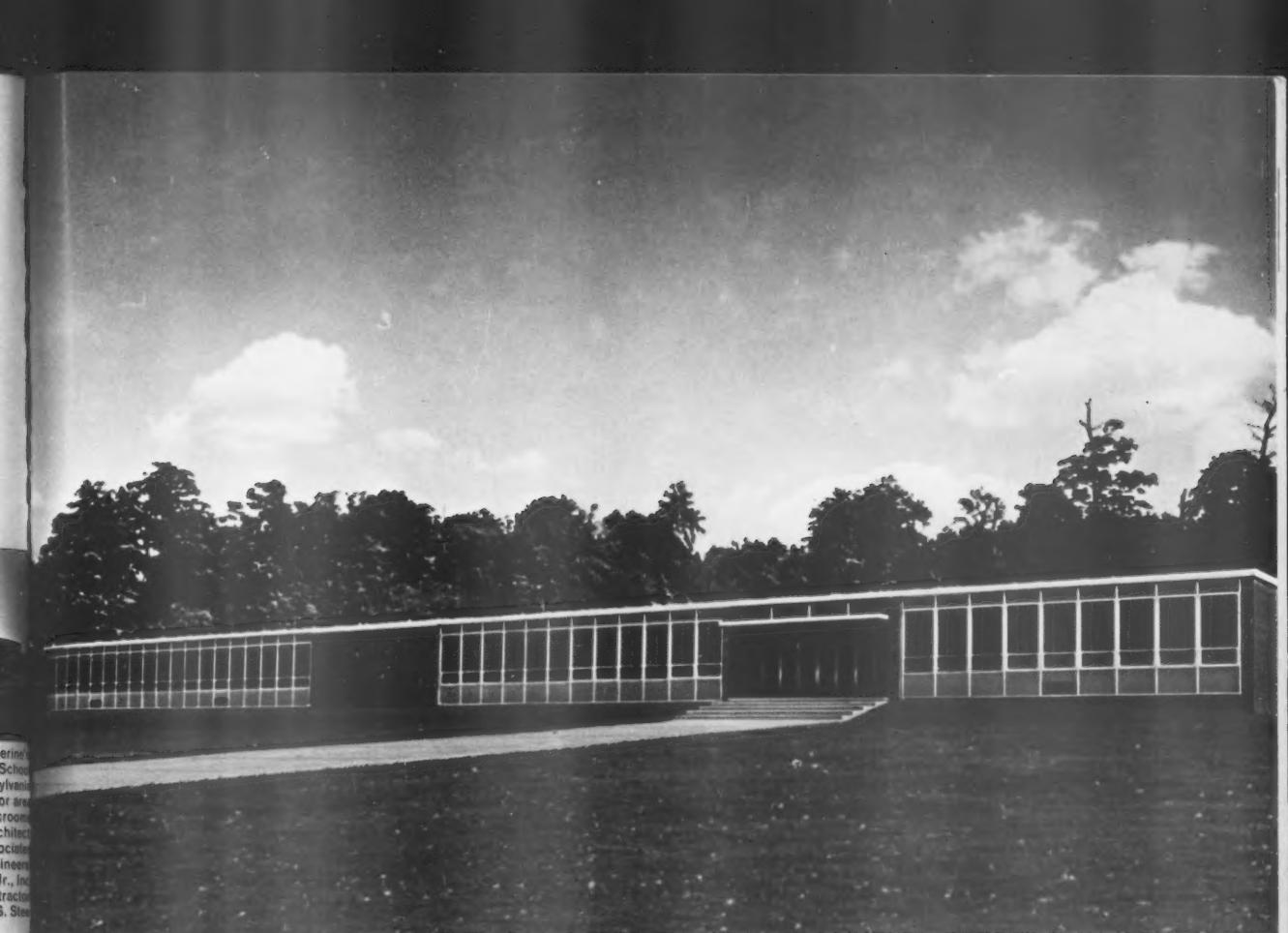


Saint Catherine's
Roman Catholic School
Wildwood, Pennsylvania
11,453 sq. ft. of floor area
Eight 24' x 36' classrooms
Architect: Joseph F. Bontempo & Associates
Engineers: Michael Baker, Jr., Inc.
General Contractor: American Bridge Division, U. S. Steel



Elementary School
Evans City, Pennsylvania
25,084 square feet floor area
Twelve classrooms
Architect: B. J. McCandless
General Contractor: Carcasse Construction Co.
New Brighton, Pa.





How to control delinquents

School action is a vital part of every local effort to reduce juvenile crime. Many school districts are actively at work on the problem in their own communities. Here are some specific examples.

■ The antics of delinquents have been grabbing big, black headlines all over the country lately. What hasn't been as well publicized is the effort being made by many schools to help curb youthful norm-violators by cooperating with local agencies. The second and final report of the National Education Association's one-year study of juvenile delinquency* discusses programs that have been undertaken by schools together with other public and private organizations to

reduce juvenile offenses. The following case histories, taken from chapter nine of the NEA report, describe programs that have been instituted by schools in four cities. They may suggest ideas for your own district.

***DELINQUENT BEHAVIOR: PRINCIPLES AND PRACTICES**, National Education Association, 1201 16th St., N.W., Washington, D. C. 350 pages. \$2.

Hialeah, Fla.: It all started in a ninth-grade civics class which was discussing juvenile delinquency. One of the students asked the teacher why the public and the newspapers were always playing up the "bad things" which teen-agers do and so very seldom give publicity to the "good things" which they accomplish. . . . As a result of the discussion it was decided to hold a contest to select and give publicity to students who are good citizens and who do perform acts of citizenry which are above and beyond the ordinary. . . . Each of the principals of the 20 schools (of Hialeah and Miami Springs) . . . appointed a representative to the Junior Citizen Award Committee.

In subsequent meetings we set up a plan by which any student could nominate another student as the outstanding junior citizen of our communities. This was done in the form of an essay listing the reasons why the nominated student should be considered for this distinction.

In our first year we were able to offer only paper certificates as awards. . . . This year we have three civic organizations who have volunteered to supply us with worthwhile awards on the elementary, junior high and senior high levels.

Los Angeles County, Cal.: A community which recognizes the contributions its young people have to offer has already taken a long step toward creating an atmosphere of mutual trust between young people and adults.

The Youth Coordinating Council provides a way in which this can be done. In 26 communities last year, youth councils were sponsored by their adult counterparts. Young people from youth organizations, both in and out of school, were given a real voice in community affairs.

Nine of the Youth Coordinating Councils developed or continued youth employment programs last year. The

Youth Council members volunteered their time, in most of these programs, to help other young people obtain part-time or summer employment. Other projects included helping youth clubs find sponsors, obtaining favorable publicity for youth, sponsoring benefit dances, working to obtain youth centers, assisting in a "Teens Against Polio" campaign, initiating a youth banking and loan system and keeping a master calendar of social and service events.

Seattle, Wash.: Seattle Public Schools have been actively engaged since 1934 in a city-wide program to cut down juvenile delinquency. In that year the first all-city conference of students representing all Seattle public schools was called to consider the vicious problems of Halloween vandalism which had reached alarming proportions. The result of this conference was a student-directed campaign in all schools for a safe and sane Halloween.

The project has been repeated annually, and now involves much more than the prevention of Halloween vandalism alone. The theme in recent years has been responsible citizenship all year around. In fact, Halloween vandalism has been reduced so much that in 1957 the total number of prank calls on the police and sheriff's telephones was 10% lower on Halloween than on a normal Thursday night.

Out of the original Halloween Conference has evolved the Inter-High School Council made up of four student leaders from each high school. They meet once a month in executive session to act on any and all problems concerning high school youth in the community.

Inter-High Council works in five broad areas: law enforcement; traffic and safety; sportsmanship; publicity; and leadership training.

Community and school authorities are deeply convinced that the activities of Inter-High Council in Seattle have been a major force in precluding in Seattle the type of vicious gang delinquency prevalent in some other cities. School authorities are convinced that there is no finer way to teach responsible citizenship than to use the schools as a laboratory in the exercise of responsible citizenship. In a large way public agencies of the city such as the Police, Fire Department and Juvenile Court have come to use the council as their means of reaching the students and to appreciate warmly the success of Inter-High School Council.

New York City: The All-Day Neighborhood Schools of the New York City Board of Education is a significant project that helps in the prevention of juvenile delinquency. These are elementary schools in which additional staff are provided to help children during the school day and in an after-school "club program" from 3 to 5 (p.m.). The warm, personal relationship between teachers and children fuses home, school and community into a sympathetic unit. Children of working parents who might otherwise be unsupervised in the empty after-school hours before the mother returns to the home, children needing help in learning processes, children with language and integration problems, and children with emotional problems benefit from the program. Statistics show that there is a conspicuous lack of truancy and a minimum of vandalism in these schools and that the delinquency rate declines. **End**

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Needed—New TB Weapons

Improved medical techniques have cut down the TB death rate. Needed: A way to prevent active tuberculosis from developing in the more than 40 million Americans who are infected.

After TB develops, drugs can save many lives . . . but they don't work for everybody. TB still kills more Americans than all other infectious diseases combined. Needed: Further study to improve usefulness of the drugs, to develop new drugs.

You can help find the answers to these and other vital tuberculosis problems. Your Christmas Seal contributions help make more research possible, help find new weapons against TB. Answer your Christmas Seal letter today.

Fight TB with Christmas Seals

This space contributed to the
National Tuberculosis Association
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SCHOOL MANAGEMENT MAGAZINES, INC.

A monthly review of ideas, new products and helpful hints

► Public asked to help prepare school budget

An unusual plan that will allow the public to write its own educational ticket for the 1960-61 school year has been inaugurated in the Plainview-Old Bethpage, N. Y., school district.

Eleven "study" meetings for piecemeal analysis of the budget are being held on a regular basis between September and next April. At that time standard budget hearings will be scheduled to precede the vote which takes place in May.

A spokesman for the school board has described the year-round budget development program as a chance "to provide citizens with an opportunity to react" to the proposed spending "section by section, rather than having to digest an entire budget" after one or two meetings at which time explanation is often difficult.

Invitations to attend the budget preparation sessions were issued to representatives of each PTA in the system, to civic leaders, school principals and staff members. The general public has also been encouraged to attend.

"Local citizens will be given an opportunity to learn how a board and the school administration develop a school budget," said Superintendent Robert F. Savitt, who first suggested the plan.

The Plainview-Old Bethpage dis-

Experimentation

Cold water was poured on a hot experiment in Ogden, Utah, recently. Two teachers were showing their junior high school students how to make fire by friction by twirling a stick in a can containing cedar bark.

Other students at the Mount Fort Junior High School smelled the pungent smoke and turned in a fire alarm. The fire department supplied the cold water.

Future experiments of this type will be held out of doors.

trict is on Long Island, where a voter revolt last year sent more than a dozen budgets down to defeat.

► Citizen survey shows great lack of school knowledge

What causes school budget defeats? Many times, after all other causes have been investigated and denied, schools turn to the most obvious one: ignorance.

In Great Neck, N. Y., a startling budget defeat last spring (See "Why the voters said no," *SM*, Sept. '59), led to a professional survey of citizen knowledge of their schools. The results showed that almost nobody among the citizenry knew what he was talking about.

Not one person interviewed could name every member of the school board. Less than 9% knew as many as three or four of the five members; the majority knew none. Almost 80% had no idea whether board members are paid for their work.

Ideas of the average teacher salary ranged all the way from \$4,000 to \$10,000. (It is actually close to \$7,700.) Almost half of the surveyed group rated Great Neck teacher salaries among the top three or four in the county. (They are not in the top 10.)

Despite the stress on the salary of Superintendent John L. Miller, as an issue in the budget debate, almost half the residents had no idea of what it is. As many people had no opinion whatever about him.

The cost of the school community relations office, a subject of much controversy during the budget debate, is an unknown factor to 88% of the people. Those who ventured an estimate mentioned figures as high as \$150,000 per year. (The correct figure is approximately \$30,000.)

As *SCHOOL MANAGEMENT* pointed out, the budget defeat was caused basically by "a combination of many real or imagined grievances which were felt by a substantial number of voters who were only faintly familiar with the schools—and who have but the vaguest understanding of why they acted as they did!"

Specialization

Sometimes we can't even dream of the lengths to which specialization has gone. Take the case of a small school lad in Buford, Ga. When a group of little girls complained that some boys were throwing rocks at them, he was among the suspected culprits rounded up by the teacher.

When confronted with the accusation, the boy stared the teacher in the eye and confidently denied that he had done any such thing.

His defense? "I'm not a rocker," he explained indignantly. "I'm a pincher."

► Parents go back to school—to teach

More than 100 adult residents of Glen Cove, N. Y., trooped back to the elementary schools one day last month to take their places at the head of the classrooms.

The parents, who had volunteered to turn teacher for a day, were invited to do so by Superintendent Robert O'Kane, who had inaugurated a similar program in Ipswich, Mass. Purpose of the one-day classroom experience is to bring home to parents exactly what is going on in the schools today.

Parents who agreed to participate met with the teachers and administrators they were to replace, during the week preceding their teaching. At that time they went over workbooks, materials and plans and received an outline of what was expected of them.

The parents received no pay but were awarded souvenir contracts which noted that their salary consisted of "satisfaction of having performed a service."

While the program was designed to let parents know about the schools, Dr. O'Kane pointed out that it would also help the administration plan improvements in the program. "We hope to learn something from these people," he said. "There are times when you bring people in that you can get an ob-

jective viewpoint that we sometimes are prone to overlook."

One school problem the parents had to recognize, immediately, cropped up before they had even entered the classrooms. Because of the great demand for teaching positions, some of the parents had to go on double sessions—teaching just half a day.

► Women bus drivers praise new grease

Use of a new lubricating grease on the school buses of Florida's Lee County has drawn high praise from the women bus drivers the school system employs. Main object of the ladies' affection: easier steering.

The new lubricating grease contains a chemical called molybdenum disulfide, which is said to cling to metal surfaces when other greases would ordinarily have worn away.

Use of the grease has been recommended to the county by Burgess Tichenor, supervisor of transportation and maintenance, because he felt it would cut repair costs and make for greater safety. This has been borne out in practice. The reaction of the women—most of whom were unaware of the change in greases—was "a big and pleasant surprise," Tichenor reports. "They didn't know what was different, but as soon as they moved those buses around a few corners, they knew something had been changed."

► A-V tools boost grades, aid retention

A new audio-visual approach to teaching that employs group communications devices has resulted in the achievement of 5% better grades by students—and they have retained 7% more knowledge of study materials in 27% less time—than those learning with conventional methods.

The results are drawn from a study, conducted by Dr. C. D. Leatherman, senior educational advisor to the U. S. Army's Ordnance Guided Missile School, Redstone Arsenal, Huntsville, Ala., of a novel audio-visual educational technique now being tried there.

In an attempt to cut down training time while still offering the student maximum educational essentials, the Army called in TelePromp Ter Corp. to prepare and carry out an audio-visual approach to guided missile instruction. The company employed a variety of unique A-V devices in developing its training program. Among them: a Multi-Matic screen permitting the projection of several component parts of

the mechanism being studied to be projected on a number of smaller screens surrounding a large central one; a Telemation synchronizing device for simultaneously staging up to 12 separate effects with the teacher's voice; and a reading unit, set before the instructor, upon which appears his pre-planned script during the course of the lesson.

Dr. Leatherman's conclusions pointing up this program's success in blending the latest audio-visual techniques into a working educational tool, should cause schoolmen to further examine the methods employed in the interests of improving their own schools.

For more information on these materials, circle number 840 on the Reader Service Card.

► Oh, the suffering

Pity poor William B. Robinson, a ship broker of Norwalk, Conn. Mr. Robinson complained to Norwalk's mayor recently because school buses were making him late to work. Seems he always takes the 7:33 train to New York, but a school bus on the route he takes to the train often holds up the traffic while it picks up children. According to Connecticut law all vehicles must stop while a school bus is loading. As a result Mr. Robinson was missing his train and arriving at work late.

Mr. Robinson's solution was a simple one: change the bus routes or the hours that children went to school to better suit his convenience. The mayor had an even simpler idea. He suggested that Mr. Robinson take an earlier train, go to another station, or move. We've heard no more on the matter.

► Fire-retardant paints protect combustible interiors

A major technical break-through in eliminating the danger of combustible interior finishes in schools has just been achieved, as demonstrated by recent flame-spread tests at the Underwriter's Laboratories in Chicago on fire-retardant paints.

These latest tests show for the first time that highly combustible interior surfaces and finishes can be reduced practically to non-combustibility with only one coat of a fire-retardant paint. The flame-spread characteristics of highly combustible fiber acoustical tile, for example, was reduced to less

than 20, where zero represents complete non-combustibility.

An extension of the rigid Underwriters' Laboratories tests from a normal 10-minute fire exposure to that of 30 minutes on two-inch Douglas fir, as used in roof deck areas, showed that a flame spread rating of less than 25 can be held with fire-retardant paints.

Combustible interior finishes—which serve as a source of fuel for rapidly spreading fires and themselves introduce smoke and toxic gases—have long been regarded as a major fire hazard.

The Pacific Coast Rating Bureau covering 11 western states now allows a 10% rate reduction on application of Underwriters' listed fire-retardant paints having flame-spread factors of less than 30.

► Educator poll replies to magazine criticisms

Magazines of general circulation carried more criticism of teacher education last year than at any time in the past decade.

Do educators themselves agree with the critics?

A poll taken at random among members of Phi Delta Kappa, professional fraternity in education, suggests that the majority agrees with two major criticisms, while disagreeing with three others. Thus 83% of those polled believe too many education courses, many of them overlapping, constitute a serious weakness in many teacher preparatory institutions. Only 15% disagree.

Again, 58% agree with the criticism that there is over-emphasis on methods courses, but 40% disagree with this statement, many of them violently.

Three other criticisms frequently appearing in literature intended for the lay reader are: 1) Certification requirements are unsound or not in the public's best interest in most states; 2) Teacher education students are generally inferior to students preparing for other professions; 3) Educationists have excessive power over school policies and programs.

Fifty-three percent of the educators tended to disagree that certification requirements are unsound.

Many educators frankly admitted that they do not know about the quality of teacher education students in comparison with students preparing for other professions, but 44% agreed that they are inferior; 48% disagreed.

As might be anticipated, a top-heavy 65% disagreed with the last statement, that "educationists" have excessive power over school policies and programs.

HOW TO BUILD A

LIBRARY on a

shoestring

budget

Here's how Zeeland, Mich., converted two expendable classrooms into a modern, spacious high school library—at a cost of just \$1,221.



Former home economics laboratory and its adjoining classroom provided the space required for Zeeland's new high school library. Removal of a non-load bearing wall made room for a reading area equal to three average classrooms.

Confronted with a huge rise in high school enrollment (70% from 1953 to 1958), the public schools of Zeeland, Mich., recently found themselves in need of a larger, more adequate library almost immediately.

The dilemma faced by Zeeland is one that confronts school districts throughout the nation today. Skyrocketing student enrollment, plus a renewed emphasis on high school scholarship, are placing a severe strain on available library facilities. But few districts possess the funds necessary to make extensive alterations on existing quarters.

In the case of Zeeland, the library in use was located in the oldest of three buildings that used to house grades seven through 12. Library space, under these conditions, was strictly limited. Expansion was virtually impossible.

The completion of a new junior high school in 1957, however, provided administrators with a way out. Several high school rooms were immediately freed by the transfer

of students to the new school. Zeeland decided to convert these rooms, as quickly and economically as possible, into a new library.

After a careful evaluation of a number of suggested plans, it was decided to establish the library on the ground floor of the main high school building to provide for easy summer, evening and public access. A former home economics laboratory, with its adjoining classroom, was selected as the location of the new library.

Work was begun during summer vacation, when the high school's custodial staff removed a non-load-bearing wall in the home economics laboratory, opening up a clear area equal in space to three average-sized classrooms (see diagram). The walls of the home economics pantry and cupboard were left intact to provide a space apart for the librarian's office and workroom. The resulting work area was slightly larger than the accepted minimum

standard of 11 by 12 feet. Special equipment which had to be purchased new included a sink, a work table and built-ins for storage.

Two smaller rooms, for periodicals and reference materials, were built at the other end of the library. Incorporated in the construction of the reference section was a large glass partition, permitting the librarian to see all students using reference materials.

Most of the furniture and shelves in the new library were taken from the old one. Some new shelving was purchased, though, to increase book capacity. Other shelving, designed to serve specific functions, was built to order by the custodial staff. The only additional purchases included several units of movable furniture as well as draperies for daylight control.

Lighting the new library proved no problem since the existing fluorescent ceiling fixtures—installed in the home economics laboratory five

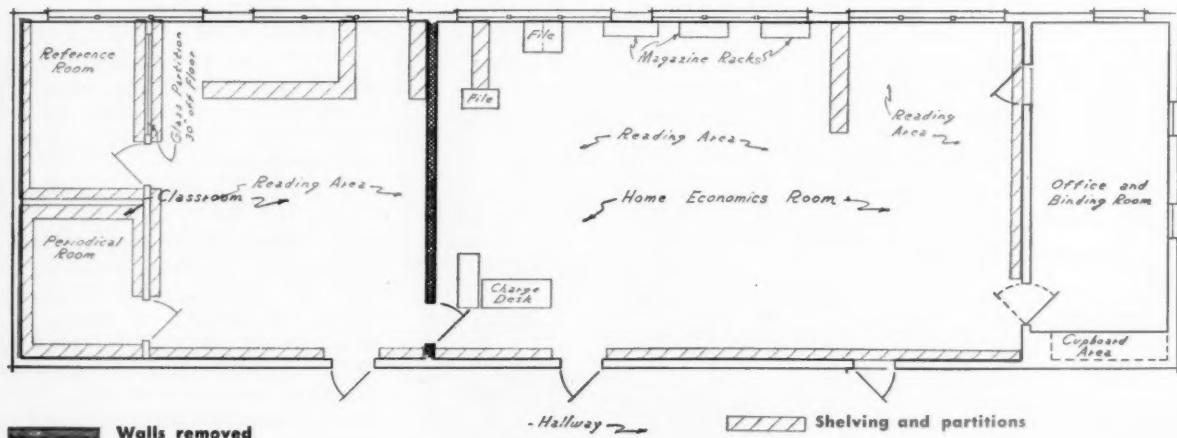
years before—easily met the 30 foot-candle standard required at library table surfaces.

By the end of the summer, the new library was complete. Its former location was made over into two classrooms, with a small adjoining office to be used for the school newspaper.

How much did all this cost Zeeland? According to Superintendent Julius F. Schipper, the total cost of the remodeling job came to \$1,221.14. Materials and labor were \$788.74, new furniture and shelving cost \$353.60 and draperies were \$78.80.

The money, thinks Superintendent Schipper, was well spent, for the library—measuring 80 by 22 feet and easily serving 70 to 80 students at a time—has had an appreciable increase in regular use. And, he feels, its spacious, up-to-date facilities should be able to meet Zeeland's needs for years to come.

End



New floor plan (in color), superimposed on old plan, reveals the few structural changes required to convert old home economics facilities into new library quarters. Wall separating office and binding room from reading area (above right) was left intact. Removal of non-load-bearing wall (crosshatched) added to reading area. Separate reference and periodical rooms were created by building a wall between them and the reading area (far left). Furniture, together with some special equipment, was purchased new to provide modern, comfortable library which will meet Zeeland's future needs.

Federal aid

continued from page 38

federal-state cooperation and research it might be possible to do this.

Q Dr. Derthick, the race with Russia certainly has been a help to people who have been urging a greater financial effort in this country to improve education. Do you think this has been oversold as an argument? Is the disparity in effort that great?

DERTHICK: I certainly don't think the challenge given us by the Soviets has been oversold. As you may or may not know, after the Cultural Exchange Agreement was signed in January, 1958, between the USSR and the USA, I headed the first official mission to study the schools of the Soviet Union.

The USSR is such a vast country and it has such a complex system and historical background that it is difficult to formulate judgments. Nevertheless, on our team we had some very sophisticated observers, and by checking observations continuously I feel we did get a rather clear picture on this point. There were many impressions that we brought back; but outstanding, over and above all of the other impressions, was the tremendous impact made on us by their deep commitment to education. Education has been in the top drawer of their scale of values. It seemed to us that they had made up their minds that education is the primary instrumentality for them to use in their

race for knowledge to attain supremacy.

In responding specifically to the second part of your question, let me make clear that we are talking about effort, and are not comparing school systems. It did seem to us that, with their fresh enthusiasm for schools and the role of trained manpower, they were more excited about education than our people, who appear all too often to take our blessings too much for granted. For example, as we kept plying our hosts with questions throughout the entire tour about where the money came from, they seemed surprised by our intense interest in the financial side. The blunt reply of one minister of education was typical of the general attitude. He said, "A child may be born healthy, but he cannot be born educated." His implication in the context of that discussion was perfectly clear and, as I have said, typical; for in the tremendous effort to meet their commitment they take it for granted that the money to do the job is available.

Q Do you attribute this to unlimited federal funds? Don't they have a ceiling, too?

DERTHICK: First, I should remind you that educational funds in the Soviet Union likewise come from several sources. It is a fact, however, that a great portion of the support, particularly for higher education, comes from the central government. I would assume certainly that they have a ceiling, but my primary point is, and I repeat it, that in the light of their tremendous commitment to education they seem not to be nearly so much concerned with financial limitations in relation to the objectives they have set.

To add another comment in responding to your prior question, I think the challenge of the Soviet commitment, along with the awakening of the underdeveloped nations of the world to the significance of education, has done much to revive concern and quicken interest in our own deep-rooted commitment. The vitality of the interest in education in these other countries and the great acceleration in their own efforts to improve schooling do make us stop and think and remember the convictions of our forebears, who themselves first began

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the struggle for universal education with equal opportunity for all.

Q. What can local superintendents or school boards do to convince citizens when they know their effort is not up to par?

DERTHICK: The real answer to that question is this: get your citizens to take enough interest to try to find out what a good school looks like, and then measure that against the realities of their own school system. That will be the answer. After all, we buy new model automobiles because we see them. As we compare them with the old model, we want the new one. If we could just put a school that is typical of our best in a show window, and take it around to local communities in this country, then we might do a better job of selling. Once people see the difference between what their money buys and the best schools, they simply won't want to deny their children. If we can't use the show-window device then we must find other methods whereby citizens can see what the best schools look like.

Q. You would concentrate on the physical plant then.

DERTHICK: Physical plant, yes, but even more important, the curricular offerings, the tools of instruction, pupil achievements and teachers. People must face the fact that we get what we pay for in education.

Q. Is there any formula, that you know of, that a district could apply to measure quality in terms of its effort?

DERTHICK: There have been a number of recommendations. Some of these suggest doubling teacher salaries or giving a formula for determining appropriate per capita operating costs. Such factors, of course, are significant, but there are other approaches in determining quality. We have, on occasion, prepared such criteria. Such criteria are also available from other sources. I prefer to see all of our citizens, working through their school boards and professional staffs, develop their own criteria to adapt and apply after intensive study and consultation.

Q. What about the Cincinnati statement that they would get only \$1.95

in aid for every \$100 they pay in federal taxes?

DERTHICK: I can't verify those figures. But it is true, of course, that Ohio has a relatively larger share of personal and corporate *income* than some other states. Thus, its taxpayers pay a relatively larger share of federal taxes. But it is our belief that an improvement in the level of education of *all* the people is in the national interest. It does not follow that in the conduct of such operations, federal expenditures should be made in the states in proportion to their tax contributions. The fundamental theory of our *national* government is that citizens throughout the country pay taxes to support federal activities which are in the interest of the people generally and the nation as a whole.

Q Is the Cincinnati board's feeling—that federal aid means federal control—a widespread one, from what you can see?

DERTHICK: From where I sit, I am not aware of any such widespread feeling. Moreover, when I worked as superintendent with a local board in a system which was the beneficiary of a number of federal aid programs, I was never conscious of federal control. My dealings were always with the state department of education. I think that the NDEA is going to do a great deal to reassure people about the role of the federal government. They'll see how the federal government can participate without violating our traditions and our principles of state and local control. The NDEA will have quite an impact because, unlike other federal aid programs, this one touches many more individuals in a personal way. These individuals will find that they are not involved with the federal government or with the United States Office of Education. The student, for example, who borrows federal funds under Title II to go to college will find that he secures that loan from his own college officials and that he pays it back to them.

Q. One more question on that score. Our states have been very uneven in the efficiency with which they have handled various federal programs.

For example, the surplus property program. Some states, like California, have 200 employees working on that program alone. Another state will have one person, with a title, trying to do the whole job. Isn't it possible that the federal government should inject itself into the picture in those states where it feels that the department of education is not doing a proper job?

DERTHICK: Absolutely not. The people of a state must look to their own officials in these matters. The federal government can provide op-

portunity and stimulation. The responsibility is on the state as to whether it takes advantage of the opportunity, or the degree to which it takes advantage. But the decisions and the administrative actions are matters that rest with the authorities in each state and there is nothing we can or should do. I might say that I have faith in our state officials and recognize that state departments of education are constantly gaining strength and are providing more aggressive leadership.

End



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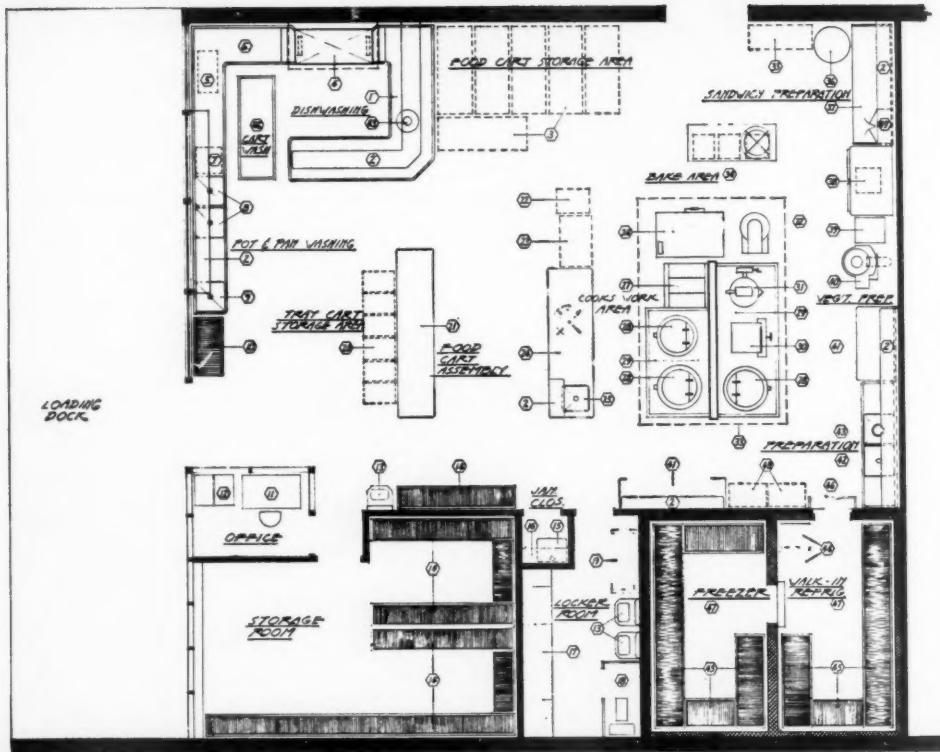
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12	FILE CABINET
13	LAV & TOWEL CAB
14	STORAGE SHELVING
15	UTILITY SINK
16	SHELF
17	LOCKERS
18	WATER CLOSET
19	LOUNGE
20	TRAY CARTS
21	HOT & COLD TABLE
22	BAKERS PAN RACK
23	POT & PAN RACK
24	TABLE, WINTERIZE FOR
25	SINK, WASHLET OVER
26	BAKE & ROAST OVEN
27	RANGE
28	KETTLE
29	S/S FLOOR PAN
30	STEAMER
31	MIXER KETTLE
32	MIXER
33	HOOD
34	BAKER TABLE
35	BREAD RACK
36	MIX BOWL
37	SANDWICH TABLE
38	REFRIGERATOR
39	PORTABLE SLICER
40	FOOD CUTTER
41	TABLE
42	VEGETABLE SINK
43	DISPOSAL
44	PORTABLE CART
45	VALK-IN SINKING
46	FLOOR GRATE
47	VALK-IN REFRIG
48	PORTABLE CARTS
49	CONTINENTAL LOCKER

Kirksville, Mo., is using one central kitchen (above) to serve almost 1,800 meals a day. The system centers on food delivered in electric carts. This kitchen cost \$60,000 to equip fully. Time and motion studies determined layout.

from the cold compartment and hot food added to them. This method is costly because of the number of carts needed.

Electrically heated and cooled carts. Pans containing hot and cold foods are placed in separate sections of the cart. The cart is then transported by truck to a receiving school and wheeled into position at the serving counter. The electric connections are re-established and food is served directly from the cart. There is very little temperature change in transportation, and everything is included in the cart but milk, which is generally delivered directly to the receiving schools as close to the time of service as possible. This is the method generally used, and is the most successful. But, no matter which system is chosen, adequate transportation trucks, holding five to seven carts each, must be bought.

Service areas

Serving areas in the receiving schools generally require a three-compartment sink, a 30-cubic-foot

reach-in refrigerator, an employees' locker room, a two-burner hot plate, a small storeroom, a work table, an ice cream cabinet and a modified serving counter.

It must be decided, at the outset, whether dishes, pans, silver, etc., will be washed and sanitized at the receiving schools or returned to the central kitchen. There is a difference of opinion regarding this. Some think that a central kitchen should handle everything but the serving of food, and others think that this represents too much of a load. It's a moot question and no pat answer exists.

Of course, all modern labor-saving equipment should be used in designing and equipping the central kitchen itself. In selecting equipment, the menu pattern that has been set must be taken into consideration.

The equipment should be located in such a way that steps and time are saved. A time and motion study should be made to insure the best locations. The necessary equip-

ment will equal the amount generally used by a large high school kitchen, if there are five to seven receiving schools. If there are more than seven, large-scale production equipment is necessary.

But, all the best equipment and planning in the world won't result in good food service unless a competent manager is hired and given complete responsibility to carry out the policy set up by the district under the direction of the superintendent and business manager.

A case example

The potential advantages of central feeding are clearly demonstrated in Kirksville, Mo. Kirksville has a high school, a junior high and four elementary schools. None offered food service of any kind. When a new high school was proposed, Superintendent O. Wayne Phillips called for a district-wide lunch program to be based around a central kitchen in the new structure.

The problem was to prepare 1,600 text *continued on page 80*

How Dade County uses central feeding



■ They call it "satellite feeding" in Dade County, Fla., but the result is the same by any name. Two or more schools are fed from a single central kitchen.

In Dade County's case, new schools are being constructed without kitchens, service being extended from kitchens already operating in older schools. Here is the Dade story as told by **Mechanical Engineer James Owens**:

Faced with the double dilemma of constantly soaring prices and exploding school registrations, the Dade County School Board decided to investigate central, or satellite, feeding two years ago.

Preceding our entry into this program we found that the vast majority of the communities now using central kitchens offer the student a prepared plate lunch with a bottle of milk, and no selection. We in no way questioned the nutritional values of these plate lunches but, by precedent, we had offered all Dade County school children a hot meal with selections of vegetables as well as salads and desserts.

The standard school lunch in Dade County calls for meat, two vegetables, dessert and milk for a per student charge of 35¢. Our program of cafeteria feeding has been well established and we could not vary from this program by reducing the service at any one given school. The children in the satellite schools had to be offered food as palatable, as nice in appearance, and with as much selection as we offer students in any of the other 170 schools which comprise the Dade County School System.

In September, 1958, satellite feeding was introduced on an experimental basis in two schools, the Homestead Junior High School with 600 students and the new Pine Villa Elementary school with some 400 students.

The Homestead school had been built without kitchen

facilities. Students from this school walked to a neighboring elementary school for lunch. Since Homestead also lacked auditorium or assembly facilities, the school board decided to erect a cafeteria which would also serve for assemblies. All food preparation would continue to be centralized at the neighboring elementary school.

The Pine Villa school in Goulds, Fla., was built adjacent to another school. It was decided to set up the new school to be satellite fed from the old one.

To insure uniform quality of service in these two satellite schools, we installed conventional all stainless-steel service lines with hot food pans, sneeze guards and other items which are standard in our schools. Each satellite school has two sets of counters behind the line. They are used for storing pots and pans, the preparation of salads, cutting and serving of desserts, storage of paper products, as well as for a set of drawers for the storage of serving utensils. A refrigerator was located between the counters to accommodate pans of desserts and salads.

The kitchens in both of the parent schools are conventional, each fully equipped with the normal amount of ranges, ovens, mixers, slicers, choppers, refrigerators, etc.

The children in the two satellite locations enter the cafeteria and proceed through the service line, first, picking up their silverware and trays and then, in line, their food, dessert, juice and milk. They then proceed to the cafeteria dining room and have their meals at tables. At the completion of the meal, they carry their trays with their waste products to the scullery window.

We are using five push cart units to bring food to each school. These are stainless-steel insulated containers with electric heating elements and will hold six conventional 20 by 20-inch hot service food pans. We also utilize four conventional five-gallon thermos cans which contain four stainless-steel pots each and an entirely enclosed aluminum pie or cake carrier for hauling pies and cakes prepared in the normal bun and pie pans.

We found that we could cut down on our costs in the satellite feeding program through the use of paper service.

Use of paper service came under sharp scrutiny during our year-long study of the satellite feeding program. A comprehensive cost analysis was conducted over a three-week period at Gratigny Elementary School, with an enrollment of 693. The cost of the conventional tableware and operating practices was measured and recorded in the first week. Paper service was introduced during the second week and continued throughout the third.

The final analysis indicated that conventional tableware reflected an operating cost per meal of \$0.02446 while paper service reduced this per meal cost to \$0.021, or a savings of approximately a penny on three servings.

Records show that the sharply reduced equipment requirements of the satellite schools constitute a saving of approximately 1,000 square feet of floor space. At a normal cost of construction, this represents about \$15,000. In addition, we estimate a saving of an additional \$15,000 on equipment that would be necessary to furnish a kitchen. Thus, initial saving on the satellite feeding operation is approximately \$30,000 over a conventional installation.

Another cost factor of paramount consideration to any school board contemplating the introduction of a satellite feeding program is the reduced labor force necessary. It was estimated that a full feeding program in a school would require 13 persons contributing 64.5 hours of work per day. In a satellite school, eight people work a total of 26.5 hours.



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to 1,800 hot meals per day in one kitchen, to get this food to six schools, and to arrange for the sanitizing of all plates, utensils, and pots utilized in the operation. Since none of the existing schools had any food service facilities, it was necessary to plan to have all sanitizing done at the central location.

The central feeding system is based around food delivered in electric carts, each holding 253 portions. Accompanying the food cart is a tray cart which holds 240 compartmented trays. This tray cart is portable and is put in position next to the hot food cart. Just before meal time, milk is delivered to each of the individual schools by the purveyors.

At lunch time, the children pass by in line. An attendant places wrapped tableware and food from the food cart on each tray. The child takes a tray, picks up a carton of milk and proceeds to the auditorium where he has his lunch. After eating, the child returns the tray to the attendant, who puts the milk carton and waste paper in a plastic can and the scraped tray back into the tray cart. Both carts are taken back to the central kitchen when lunch is completed. Paper and cartons are picked up at the individual schools by the garbage man.

How much does it cost

The cost of this project is approximately \$40,000 for the space and \$60,000 for the equipment. The equipment includes the truck that is used for transporting the food carts to the various schools, and the carts themselves. The equipment is built to National Sanitation Foundation specifications and includes every possible labor-saving device.

If the school district had decided to build individual kitchens in each school, the total cost would have been \$300,000—so the central kitchens represent a saving of \$200,000.

Further savings are anticipated. Latest figures regarding the number of meals served per man-hour show the national average to be 13.4 in elementary schools. The Kirksville central kitchen is set up to serve a minimum of 20. To have provided food preparation and service facilities in each individual school would have been prohibitive. **End**

Yours for the asking

continued from page 14

esign languages. It is cross-indexed with the SVE Education Catalog for quick, easy reference, and is suitable for posting on school bulletin-boards, in audio-visual centers, principals' offices or classrooms.

For a free copy of this chart, circle number 894 on the Reader Service Card.

Shower equipment. Multi-person shower baths are described in a newly-published bulletin available from Bradley Washfountain Co. Details of the basic shower column are given together with installation and floor plan suggestions. Illustrations of the columns are included as are photos of the three- and two-person wall mounted shower.

For a free copy of this bulletin, circle number 888 on the Reader Service Card.

Office procedure. Time and space-saving filing techniques are presented in a handy two-color booklet available from Acco Products. The advantages of systematized filing and binding are stressed in sections devoted to the desk, the file and the shelf. Included are a number of illustrations of binders, fasteners, hole punches, folders and a variety of specialty products.

For a free copy of this booklet, circle number 886 on the Reader Service Card.

Wood in schools. The advantage of one-story school houses of wood is pointed out in an attractive 16-page booklet available from the National Lumber Mfrs. Assoc. Illustrated with photographs and spot drawings in two colors, the booklet describes wood's attractiveness, versatility, flexibility, durability and safety in schoolhouse construction.

For a free copy of this booklet, circle number 879 on the Reader Service Card.

Kitchen equipment. A complete line of modern kitchen machines is described and illustrated in a colorful broadside, just released. Illustrated are dishwashers, peelers, mixers, choppers, saws, slicers and steak machines with informative descriptions of each. A total of 28 product illustrations highlights outstanding features of the machines that help cut costs and time.

For a free copy of this broadside, circle number 857 on the Reader Service Card.

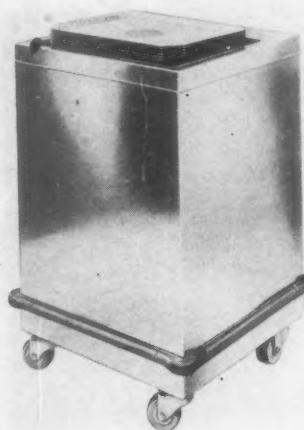
SM

PRESS RELEASES

News from the business firms serving your schools

Self-leveling tray dispenser

Seamless, welded, stainless steel cabinets are now featured on mobile, self-leveling tray dispensers manufactured by the Lowerator Div., American Machine & Foundry Co. The tray dispenser has a capacity of from 90 to 150 trays; standard models accom-



modate tray sizes from 10 inches by 14 inches through 16 inches by 22 inches. The self-leveling rack carrier operates with calibrated springs, sprocket and chain mechanism. It features a slide panel for easy cleaning of springs. Vertical steel guides maintain perfect alignment of trays. Similar units are available for dispensing dishes, cups and glasses.

For more information, circle number 882 on the Reader Service Card.

Tablet arm chair line

A line of folding chairs, easily converted into tablet arm chairs, has just been introduced by the BeLa Division of J & J Tool & Machine Co. The patented Magic Fold tablet arm folds away at a flick of the wrist. Thus multi-purpose line of chairs is available in 25 steel, plywood or upholstered seat styles and duran, nylon or mohair upholstery. They come in a choice of seven baked enamel frame colors, or chrome or gold-bronzed plating. Other features include multi-contoured plywood seats and backs, self-leveling gliders and non-tip, safety design. A

feature chair in the new series is of sculptured fiberglass with molded seat and modern tubular frame.

For more information, circle number 898 on the Reader Service Card.

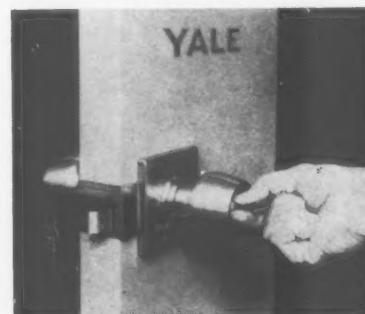
Combination polish and sealer

A finish for floors that seals and polishes in one operation has been developed by Huntington Laboratories. Called Poli-Seal, it works well on light terrazzo, white cement, magnesite, white marble, cork, wood, ceramic tile, quarry tile and slate floor. It can also be used on most vinyls and linoleums. Consisting of light-colored raw materials suspended in special solvents, the product provides a water-white finish that will not darken the lightest floors. In addition, it is water-resistant and deters crystallization of hard floors. Poli-Seal, according to the manufacturer, can be buffed to create a hard, mirror-like, slip-resistant surface and worn traffic lanes can be easily patched. Free samples are available.

For more information, circle number 899 on the Reader Service Card.

Simplified lock installation

Installed by simply sawing a rectangular opening in the edge of a door and drilling holes for attaching screws, Yale & Towne's recently developed lines of Mono-locks are ruggedly built and are available in a broad range of designs. They can be keyed alike, master-keyed or incorporated into existing Yale master-key systems. Available in both the 6100—with 2.5-inch back-



sets—and 6200—with 2 3/4-inch backsets—series, they are designed for flat front doors of 1 1/8-inch thickness and for beveled front doors of 1 3/4-inch to 2 1/4-inch thickness. Latch bolts for both series have a 3/4-inch throw while dead bolts have a 5/8-inch throw. Unlike other lock-sets of this type, the Mono-locks have standard vertical keyways permitting natural, efficient functioning of the lock cylinder mechanism.

For more information, circle number 891 on the Reader Service Card.

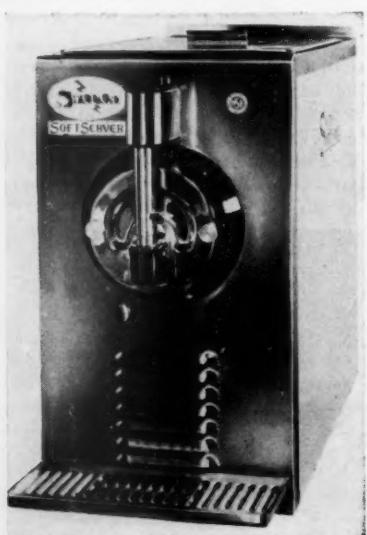
Decorative wall plates

Wall plates of all kinds—switches, plug outlets, telephone plugs—can now be part of the decorative scheme of all interiors with General Electric Co.'s decorator series wiring installation coverings. Available in a variety of combinations—single, double and triple outlet; single, double and triple switches; combined outlet and switch plates; blank inserts—the new line is composed of frames in ivory or brown plastic. Finely textured metal inserts, resistant to fingermarks and scratches are also supplied. These inserts are pale gold on one side, soft silver on the other, and take clear plastic inserts which can be backed up with wallpaper, fabric or paint to match wall decor.

For more information, circle number 859 on the Reader Service Card.

Space saving freezers

A line of self-contained "SpaceSaver" milk shake and soft ice cream machines is available from Sweden Freez-



82

er Mfg. Co. The line features units measuring 14 1/4 inches in width and 26 inches in depth. Though compact, they have the same production capacity and heavy-duty performance features of the company's floor models. The SpaceSaver models have hermetically sealed condensing systems with solenoid-controlled, screened capillary tube for trouble-free maintenance. There are no switches, levers or valves requiring manipulation or attention—a finger lift of the gate plunger starts the dasher motor and dispenses the product.

For more information, circle number 900 on the Reader Service Card.

AM-FM tuners

Twin AM and FM tuners, available either separately or combined into an AM-FM stereo tuner, have been an-



nounced by Stromberg-Carlson. Each unit in the combination tuner has its own individual circuits, thus they may be operated separately or in unison as a stereo tuner. Also provided on the FM chassis is space for a multiplex adapter, to be installed whenever standards are established for multiplex broadcasting or stereo programs. Face plates for these tuners are available finished in either gold and white, or black and brushed chrome; top cover—an optional extra—comes in white, black, tan or red.

For more information, circle number 892 on the Reader Service Card.

Automatic coin feeder

Increased efficiency in coin handling is achieved with the new Klopphopper, developed by Klopp Engineering, which automatically feeds coins into counting and sorting machine hoppers. The unit contains a self-adjusting switch control that regulates coin flow to correspond with the capacity of the operator or the counting and sorting machinery. Designed for use with most makes of counters and sorters, it has a capacity of 10,000 to 12,000 coins and a maximum delivery of 6,000 coins per



minute. It is 18 inches in diameter, 20 inches high and features a polished aluminum and crackled gray enamel finish. It plugs into any standard 110 volt electrical outlet.

For more information, circle number 885 on the Reader Service Card.

Table-top offset duplicator

A compact offset duplicator that can be set on top of a table has just been announced by A. B. Dick Co. It measures 24 1/16 inches in width by 25 1/8 inches in length by 20 3/4 inches in height. The duplicator features an automatic feed system and an adjustable feed table for shifting quickly to varying sizes of paper. In addition it offers a precisely metered moistening system for ink-water balance. Speed of the new table-top machine is up to 7,800 copies per hour, depending on paper and type of duplicating required. Self-adjusting cylinders allow the operator to switch from light-weight paper to card stock and from lightest paper master to heavy metal plates without changing either cylinder or roller pressures.

For more information, circle number 896 on the Reader Service Card.

Portable adding machine

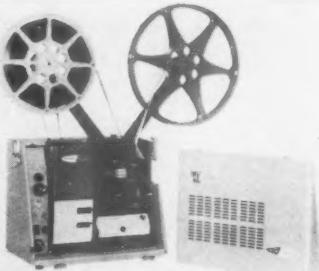
Full keyboards and portability are the major features of the Add-O-Matic line of adding machines now being marketed by R. C. Allen. Consisting of five models, the new line offers unusually large print. Model 605 is hand-operated with five column listing and six column totaling capacities. Model 606 is also hand-operated and has a six column listing and six column total. Each prints subtract items in red, has visible dials and automatic clear signal. Model 606E, electrically oper-

ated, has six column capacity, offers automatic total and clear signal, visible dials, and motorized subtract, sub total and multiply keys. Model 707 is handle operated and has all the features of the other Add-O-Matics in addition to a seven column listing and totaling capacity. Model 707E, an electrically operated portable with the same features as 606E, has seven column listing and totaling capacities.

For more information, circle number 901 on the Reader Service Card.

Improved movie projector

Quietness of operation, the sound system, the light output and maintenance procedures have all been improved in the Kalart/Victor Model 70-15, 16 mm. sound motion picture projector just released by the Victor Animatograph Corp., Div. of Kalart. Re-



design of mechanical parts has resulted in reduction of motor, gear and air noises. The speaker, an integral part of the projector door, may be detached and placed anywhere up to 50 feet away. Light output has been increased 12% and still pictures are now 500% brighter than before. The projector, in its restyled wrinkle-finished aluminum case, has a low, slim, light look. It is 10% lighter than previous Victors and has all projector and amplifier controls grouped together on one side.

For more information, circle number 887 on the Reader Service Card.

Visual aids materials kit

A sampler assortment of materials to be used in preparing professional, dramatically illustrated slide lectures is available from the Charles Beseler Co. The Beseler Starter Kit is designed for use with the company's Vu-Graph overhead projector. Messages and illustrations of all kinds can be traced, drawn, lettered or typed, either in advance or on-the-spot in the lecture room. Materials include—for both col-

or and black and white transparencies—acetate sheets, mounts, film, tape, special pencils, inks, brushes, cleaners, tracing pad and more. The entire kit is packed in a heavy-duty, leatherette-covered case with hinged drop front.

For more information, circle number 875 on the Reader Service Card.



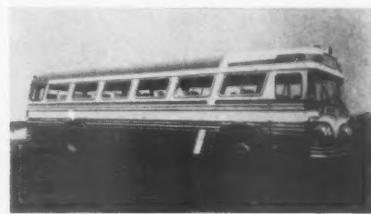
Tough wood finish

Combining the qualities of lacquer and synthetic varnish, yet more tenacious than any previously developed, the Gilbert Spruance Co.'s Scanlac is designed for applications where rough use is expected. It is resistant to scuffs, scratches and stains and its color retention qualities protect the good looks of school furniture for long periods.

For more information, circle number 858 on the Reader Service Card.

Economy bus line

An economical, low maintenance passenger bus, the Oneida Suburban, has been introduced by Oneida Products, Div. of Henney Motor Co. The bus features sliding 54-inch aluminum sash, hinged at the top; headrest-type seats; dual headlights; heavy duty floor covering; sedan doors; 76-inch headroom; wrap-around, two-piece windshield; roomy underfloor luggage compartments; and a large variety of transmissions, brakes, steering and electrical systems. Appointments include roomy storage racks, individually focused reading lights and rugged, ribbed exterior impact rails. The new



bus can be custom-built to customer's specifications with regard to equipment, appointments and capacity.

For more information, circle number 881 on the Reader Service Card.

Paste pen

A streamlined new paste pen, the Exec, is designed to do quick, neat pasting by making 5,000 dots without refilling. Paste can be "penpointed" accurately where needed without wasting a drop. Paste is non-toxic, dries in seconds and rubs off easily.

Guaranteed leakproof, the paste pen is made of high impact plastic, comes in lustrous red and white.

For more information, circle number 878 on the Reader Service Card.

Fold-a-way gym unit

A compact, simple gym unit that folds to a trim four- by 42- by 84 inches is available from Jarke Mfg. Co. The Stamm's Gym is made of lightweight steel tubing, strong enough to support two adults, and features wide leg construction to prevent skidding or tipping on any kind of surface. It can be used anywhere, indoors or out, can be folded away in seconds and set up again just as quickly. Consisting of a series of overhead, base and cross bars and a horizontal seat, the gym unit can be used for an endless variety of chin, dip, squat and stretch exercises in physical education programs.

For more information, circle number 874 on the Reader Service Card.

Accessory projection lens

A slide or filmstrip projector can remain in one position while producing images that fill screens of varied widths without refocusing when equipped with the newly-developed Telefocal lens introduced by Viewlex, Inc. The lens, with an infinitely adjustable 3.5-inch to six-inch focal length, permits projection of different sized images in limited space.

For more information, circle number 873 on the Reader Service Card.

Dacron fire hose

The outer and inner jackets of a new, long-wearing fire hose announced by the Fyr-Fyter Co. are made of light, resilient Dacron polyester fiber. Since the two jackets are "rubber bonded" together, they can't slip or rub to cause concealed wear and shorten hose life. With a tube that's freezeproof to 65 degrees below zero, the new Ambassador hose resists mildew, abrasion, water and chemicals and is available in 50-foot lengths of either 1½-inch or 2½-inch diameter.

For more information, circle number 862 on the Reader Service Card.

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SAFELY
OUTDOORS

Only \$110.00
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NO INSTALLATION COST

Burn wrappings, sweepings, papers, cartons, packing, rags, food waste, safely outdoors. Scientific draft control ends fire hazards of flying ash, sparks, burning blowing papers. Burns damp, green, or dry refuse to fine ash in any weather. Minimizes smoke and smell, needs no watching. Safe for use 10' from buildings. Stands 52" high x 35" square at base. 10 bushel burning capacity. Complete with hinged hood, ash pan base and grate and cleanout door. Made of aluminumized steel (molten aluminum bonded to steel) with replaceable inner steel panel construction for long life. Shipped assembled—weight 170 lbs. Only \$110.00 F.O.B. Cleveland. Satisfaction guaranteed. Other sizes available.

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KEY		PAGE
700	Aetna Life Affiliated Companies	10-11
	Agency: William B. Remington, Inc.	
701	Alsto Co.	84
	Agency: Baisch Advertising	
702	American Bitumuls & Asphalt Co.	28
	Agency: John O'Rourke Advertising	
703	American Gas Association	62-63
	Agency: MacLeod & Grove, Inc.	
704	Anchor Post Products, Inc.	6
	Agency: Van Sant Dugdale & Co., Inc.	
705	Bausch & Lomb Optical Co.	17-20
	Agency: Wolff Associates, Inc.	
706	Butler Mfg. Co.	Back cover
	Agency: Aubrey, Finlay, Marley & Hodgson, Inc.	
707	Central Scientific Co.	69
	Agency: Marsteller, Rickard, Gebhardt and Reed, Inc.	
708	Chevrolet Div., General Motors Corp.	8-9
	Agency: Campbell-Ewald Co., Inc.	
709	Desks of America, Inc.	4
	Agency: L. D. Zellin & Co.	
710	E. I. du Pont de Nemours & Co., Inc.	80
	Agency: Batten, Barton, Durstine & Osborn Inc.	
711	Field Enterprises Educational Corp. Inside front cover	
	Agency: Keyes, Madden & Jones	
712	Hamilton Mfg. Co.	83
	Agency: The Brady Co.	
714	Hillyard Chemical Co.	2
	Agency: Fardon Adv., Inc.	
715	J. I. Holcomb Mfg. Co., Inc.	55
	Agency: L. T. Sogard & Co.	
716	Huntington Laboratories	76
	Agency: Bonsib, Inc.	
717	S. C. Johnson & Son, Inc.	25-27
	Agency: Needham, Louis & Brorby, Inc.	
718	Kimberly-Clark Corp.	7
	Agency: Foote, Cone & Belding	
719	Knight Mfg. Co.	4
	Agency: Williams & Assoc.	
720	Magnetic Recording Industries, Ltd.	55
	Agency: Harold Marshall Adv. Co., Inc.	
721	Minneapolis-Honeywell Regulator Co.	52-53
	Agency: Foote, Cone & Belding	
722	National Super Service Co.	56
	Agency: Beeson Reichert Inc.	
723	Philco Government & Industrial Div.	33
	Agency: Maxwell Associates, Inc.	
724	Pittsburgh-Des Moines Steel Co.	5
	Agency: Downing Industrial Advertising, Inc.	
	Radio Corp. of America and Affiliated Companies	
	Agency: Al Paul Leffon Co., Inc.	
726	Educational Services	15
727	Sound Div.	22
728	Rauland-Borg Corp.	75
	Agency: George Brodsky Adv., Inc.	
729	Sarkes Tarzian, Inc.	69
	Agency: H. L. Ross	
	School Management Magazines, Inc.	1, 84
730	Shwayder Bros., Inc.	14
	Agency: Grey Advertising Agency, Inc.	
731	John J. Sjostrom Co.	77
	Agency: Richardson, Thomas & Bushman, Inc.	
732	Standard Change-Makers, Inc.	Inside back cover
	Agency: Caldwell, Larkin & Sidener-VanRiper, Inc.	
734	Stromberg Time Corp.	12
	Agency: G. F. Sweet & Co.	
735	The Strong Electric Corp.	59
	Agency: Wendt Advertising Agency	
	U. S. Steel Corp.	
	Agency: Batten, Barton, Durstine & Osborn, Inc.	
736	Ambridge Div.	66-67
737	Cyclone Fence Dept., Amer. Steel & Wire Div.	29-32

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Standard Change

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COMPACT—PORTABLE

Overall size: 18" wide, 13" high, and 9" deep. Total weight 27 lbs. Shipping weight 28½ lbs. Operates on 110 volt AC, 60 Cycle current. Finished in Hammerloid Brown, with leather counter-balanced handle.



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Counts an average of 250 coins a minute . . . 15,000 per hour. Handles 1¢, 5¢, 10¢ and 25¢ coins. 50¢ coins remain in hopper. Separate sorting and counting operations provide automatic check of total.

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Simply plug in the machine, set the counter, and flip the switch. Pour in coins and machine works automatically.

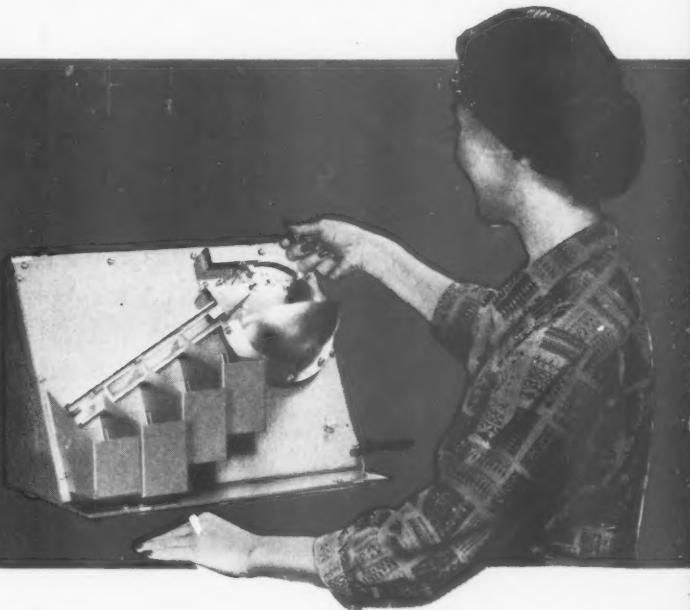
NO RUBBER WHEELS OR BELTS TO WEAR OUT

Outside of the motor itself, the Standard Change Counter and Sorter has only two moving parts, both made of durable metal. It's built to last, and give years of faithful service.

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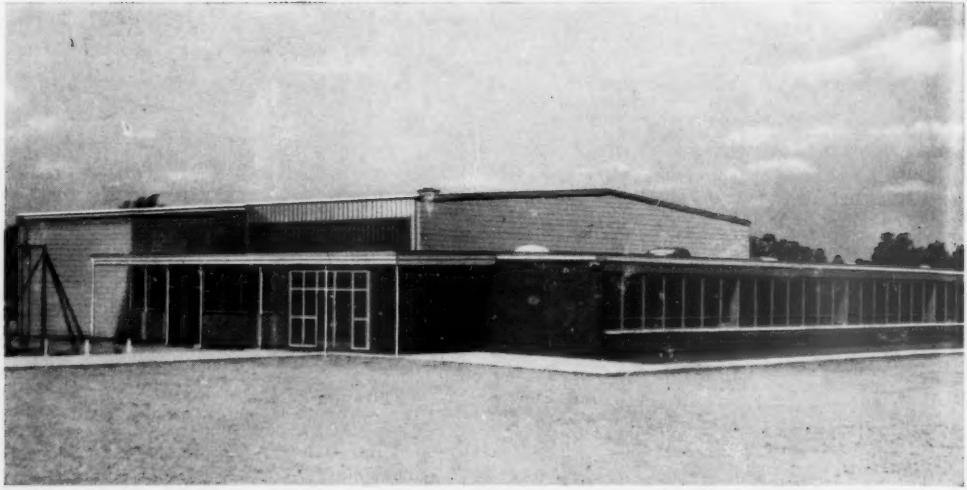
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MODEL CS-100
Finished in Hammerloid Brown
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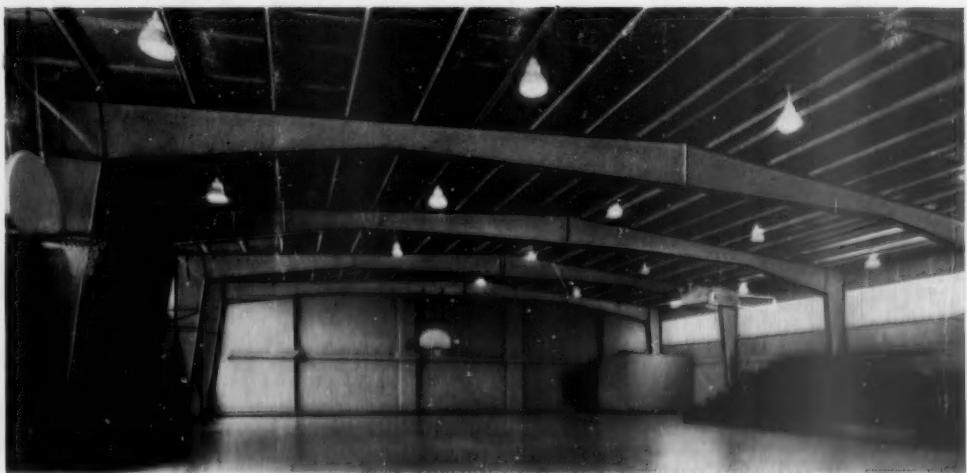
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